

=> fil medlin

FILE 'MEDLINE' ENTERED AT 10:20:17 ON 15 FEB 2001

FILE LAST UPDATED: 27 OCT 2000 (20001027/UP). FILE COVERS 1960 TO DATE.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2000 vocabulary. Enter HELP THESAURUS for details.

The OLDMEDLINE file segment now contains data from 1958 through 1965. Enter HELP CONTENT for details.

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THIS FILE CONTAINS CAS REGISTRY NUMBERS FOR EASY AND ACCURATE SUBSTANCE IDENTIFICATION.

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=> d que 120

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L1      120 SEA FILE=MEDLINE ("SCHUBERT P"/AU OR "SCHUBERT P A"/AU OR
      "SCHUBERT P E"/AU OR "SCHUBERT P H"/AU OR "SCHUBERT P J"/AU OR
      "SCHUBERT P U"/AU)
L2      118 SEA FILE=MEDLINE ("NEUMANN S"/AU OR "NEUMANN S A"/AU OR
      "NEUMANN S J"/AU OR "NEUMANN S M"/AU OR "NEUMANN S Z"/AU OR
      "NEUMANN SCHMIDT S"/AU)
L3      4 SEA FILE=MEDLINE "PAWELZIK M"/AU
L4      5 SEA FILE=MEDLINE ("LINKWEILER W"/AU OR "LINXWELLER W"/AU)
L5      174 SEA FILE=MEDLINE ("BURGER C"/AU OR "BURGER C A"/AU OR "BURGER
      C D"/AU OR "BURGER C H"/AU OR "BURGER C J"/AU OR "BURGER C
      L"/AU OR "BURGER C S"/AU OR "BURGER C W"/AU)
L6      24 SEA FILE=MEDLINE "BUBERT A"/AU
L7      319 SEA FILE=MEDLINE ("GOEBEL W"/AU OR "GOEBEL W E"/AU OR "GOEBEL
      W F"/AU OR "GOEBEL W M"/AU OR "GOEBEL W S"/AU)
L8      181 SEA FILE=MEDLINE ("KOHLER S"/AU OR "KOHLER S A"/AU OR "KOHLER
      S E"/AU OR "KOHLER S J"/AU OR "KOHLER S K"/AU OR "KOHLER S
      L"/AU OR "KOHLER S M"/AU OR "KOHLER S T"/AU OR "KOHLER S
      W"/AU)
L9      910 SEA FILE=MEDLINE (L1 OR L2 OR L3 OR L4 OR L5 OR L6 OR L7 OR
      L8)
L10     8265 SEA FILE=MEDLINE LISTERIA OR MONOCYTOGENES
L11     59 SEA FILE=MEDLINE INVASION (5A) ASSOCIAT? (5A) PROTEIN#
L12     1855 SEA FILE=MEDLINE IAP#
L13     101 SEA FILE=MEDLINE L9 AND L10
L14     10 SEA FILE=MEDLINE L13 AND (L11 OR L12)
L15     3 SEA FILE=MEDLINE L14 AND (ANTIBOD? OR IMMUNOGLOBULIN# OR
      IMMUNOGEN? OR EPITOPE#)
L19     1 SEA FILE=WPIDS L14 AND (ANTIBOD? OR IMMUNOGLOBULIN# OR
      IMMUNOGEN? OR EPITOPE#)
L20     4 DUP REM L15 L19 (0 DUPLICATES REMOVED)

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=> d bib abs l20 1-4

YOU HAVE REQUESTED DATA FROM FILE 'MEDLINE, WPIDS' - CONTINUE? (Y)/N:y

L20 ANSWER 1 OF 4 MEDLINE
 AN 1998156131 MEDLINE
 DN 98156131
 TI In situ detection of a virulence factor mRNA and 16S rRNA in
Listeria monocytogenes.
 AU Wagner M; Schmid M; Juretschko S; Trebesius K H; **Bubert A**;
Goebel W; Schleifer K H
 CS Lehrstuhl fur Mikrobiologie, Technische Universitat Munchen, Germany..
 wagner@biol.chemie.tu-muenchen.de
 SO FEMS MICROBIOLOGY LETTERS, (1998 Mar 1) 160 (1) 159-68.
 Journal code: FML. ISSN: 0378-1097.
 CY Netherlands
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 199805
 EW 19980504
 AB Simultaneous in situ analysis of the structure and function of bacterial
 cells present within complex communities is a key for improving our
 understanding of microbial ecology. A protocol for the in situ
 identification of **Listeria** spp. using fluorescently tagged,
 rRNA-targeted oligonucleotide probes was developed. Ethanol fixation and
 enzymatic pretreatment with lysozyme and proteinase K were used to
 optimize whole cell hybridization of exponential phase and stationary
 phase **Listeria** spp. cells. In parallel, transcript probes
 carrying multiple digoxigenin molecules were combined with
 anti-digoxigenin Fab **antibody** fragments labeled with horseradish
 peroxidase to detect, via the catalytic deposition of fluorescein-
 tyramide, the **iap**-mRNA in single **Listeria**
monocytogenes cells. The **iap** gene encodes the associated
 virulence factor p60. Application of the new signal amplification
 technique resulted in strong signals comparable in intensity to those
 obtained with fluorescently labeled rRNA-targeted oligonucleotide probes.

L20 ANSWER 2 OF 4 MEDLINE
 AN 97123656 MEDLINE
 DN 97123656
 TI Isolation of catalase-negative **Listeria monocytogenes**
 strains from listeriosis patients and their rapid identification by
 anti-p60 **antibodies** and/or PCR.
 AU **Bubert A**; Riebe J; Schnitzler N; Schonberg A; **Goebel W**
 ; **Schubert P**
 CS Lehrstuhl fur Mikrobiologie, Theodor-Boveri-Institut fur
 Biowissenschaften, Universitat Wurzburg, Germany.. bubert@biozentrum.uni-
 wuerzburg.de
 SO JOURNAL OF CLINICAL MICROBIOLOGY, (1997 Jan) 35 (1) 179-83.
 Journal code: HSH. ISSN: 0095-1137.
 CY United States
 DT Journal; Article; (JOURNAL ARTICLE)

LA English
 FS Priority Journals
 EM 199705
 EW 19970504
 AB Two catalase-negative **Listeria monocytogenes** serovar 1/2b strains were isolated from listeriosis patients in 1995 in Germany. The infections appeared in individuals from different cities at different seasons and were caused by **L. monocytogenes** strains of different clonal types. In particular, the catalase reaction of one strain isolated from blood was consistently negative, whereas this reaction was only reversibly blocked when the strain was freshly isolated from ascitic fluid. After subculturing, the catalase-positive reaction was restored. Initially, identification of these isolates was difficult to achieve not only because of the lack of a catalase reaction, which generally distinguishes **L. monocytogenes** from other morphologically similar pathogenic gram-positive bacteria, but also because other routinely used biochemical tests such as CAMP and the commercial API test gave unclear results. However, rapid and unequivocal identification of these strains was possible by analyzing secretions of the p60 protein in culture supernatants by enzyme-linked immunosorbent assay or Western blot (immunoblot) analysis with our recently developed **Listeria-** and **L. monocytogenes-specific anti-p60 antibodies**. Additionally, the identifications were confirmed by **Listeria-** and **L. monocytogenes-specific** PCR analyses with primers derived from the **iap**, **hly**, and **prfA** genes. Immunoanalyses also allowed for the differentiation of these two strains, whereas no differentiation was possible by PCR when the internal, variable repetitive **iap** gene portion was analyzed. However, size variations of the PCR products comprising these gene portions which were obtained from a number of **L. monocytogenes** strains belonging to the same serotypes indicated that this type of PCR is not only useful for specific identifications but may be used in parallel as an additional marker for epidemiological studies. In conclusion, the data suggest that catalase production should not be taken as a strict criterion for the identification of listeriae. Furthermore, at least the infection caused by the stably catalase-negative strain supports the notion that catalase does not seem to be necessary for the intracellular growth of **L. monocytogenes**.

L20 ANSWER 3 OF 4 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
 AN 1993-406956 [51] WPIDS
 DNN N1993-314981 DNC C1993-180859
 TI New primers for PCR detection of **Listeria** - including individual species, also new peptide(s) for raising **antibodies** for immunochemical detection.
 DC B04 D16 J04 S03
 IN **BUBERT, A; BURGER, C; GOEBEL, W; HOFMANN, G; KOEHLER, S; LINKWEILER, W; NEUMANN, S; PAWELZIK, M; SCHUBERT, P**
 PA (MERE) MERCK PATENT GMBH
 CYC 10
 PI DE 4318450 A1 19931216 (199351)* 19p
 EP 576842 A2 19940105 (199402) DE 38p
 R: BE CH DE FR GB IT LI NL
 JP 06233699 A 19940823 (199438) 20p
 EP 576842 A3 19941123 (199536)
 US 5932415 A 19990803 (199937)

ADT DE 4318450 A1 DE 1993-4318450 19930603; EP 576842 A2 EP 1993-108775
19930601; JP 06233699 A JP 1993-140531 19930611; EP 576842 A3 EP
1993-108775 19930601; US 5932415 A Cont of US 1993-75248 19930611, Div ex
US 1995-412227 19950327, US 1995-456670 19950601

PRAI DE 1992-4219111 19920611; DE 1992-4239567 19921125

AN 1993-406956 [51] WPIDS

AB DE 4318450 A UPAB: 19940209

New primers from the **iap** (invasion-associated protein) gene for amplification of nucleic acid are of formulae (Va)-(Vh) and/or their complementary sequences. X1AATATGAAAAAAGCX2 (Va) X1TAACAGCAATTCAEX2 (Ve) X1GCTTCGGTCGCGTAX2 (Vb) X1CTGAGGTAGCEAGCX2 (Vf) X1ACAGCTGGATTGCX2 (Vc) X1AGCACTCCAGTTGTTAX2 (Vg) X1ACTGCTAACACAGCTX2 (Vd) X1GCAGTTTCTAAACCTX2 (Vh) X1 and X2 = H or 1-20 nucleotide residues.

USE - The primers are used to detect **listeria** by gene amplification and the Ab to detect them by usual immunoassay methods (partic. ELISA). By appropriate choice of reagents partic. species can be detected (esp. **L. monocytogenes**).

Dwg.1/5

L20 ANSWER 4 OF 4 MEDLINE

AN 93094153 MEDLINE

DN 93094153

TI Structural and functional properties of the p60 proteins from different **Listeria** species.

AU **Bubert A**; Kuhn M; **Goebel W**; **Kohler S**

CS Lehrstuhl fur Mikrobiologie, Theodor-Boveri-Institut fur Biowissenschaften, Universitat Wurzburg, Germany..

SO JOURNAL OF BACTERIOLOGY, (1992 Dec) 174 (24) 8166-71.
Journal code: HH3. ISSN: 0021-9193.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

OS GENBANK-X52268; GENBANK-M80347; GENBANK-M80348; GENBANK-M80349;
GENBANK-M80350; GENBANK-M80351; GENBANK-M80353; GENBANK-M95579

EM 199303

AB The major extracellular protein p60 of **Listeria monocytogenes** seems to be required for this microorganism's adherence to and invasion of 3T6 mouse fibroblasts but not for adherence to human epithelial Caco-2 cells. Western blot analysis with polyclonal **antibodies** against p60 of **L. monocytogenes** indicated the presence of cross-reacting proteins in the culture supernatants of all **Listeria** species. Protein p60 of **L. monocytogenes** could restore adhesion of the **L. monocytogenes** mutant RIII (impaired in the synthesis of p60) to mouse fibroblasts more efficiently than that of **Listeria grayi**. The amino acid sequences of the p60-related proteins of **L. innocua**, **L. ivanovii**, **L. seeligeri**, **L. welshimeri**, and **L. grayi** indicated highly conserved regions of about 120 amino acids at both the N-terminal and the C-terminal ends. The middle portions of these proteins, consisting of about 240 amino acids, varied considerably. These parts include the repeat domain consisting of repetitions of Thr (T) and Asn (N) which was present only, albeit in different arrangements, in the p60 proteins of **L. monocytogenes** and **L. innocua**. The p60-related proteins of **L. grayi**, **L. ivanovii**, **L. seeligeri**, and **L. welshimeri** each contained an insertion of 54 amino acids which was absent in the p60 proteins of **L. monocytogenes** and **L. innocua**.

Baskar 09/372,036

Searched by David Schreiber 308-4292

=> fil hcaplus

FILE 'HCAPLUS' ENTERED AT 08:52:56 ON 15 FEB 2001
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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FILE COVERS 1967 - 15 Feb 2001 VOL 134 ISS 8
FILE LAST UPDATED: 14 Feb 2001 (20010214/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

Now you can extend your author, patent assignee, patent information, and title searches back to 1907. The records from 1907-1966 now have this searchable data in CAOLD. You now have electronic access to all of CA: 1907 to 1966 in CAOLD and 1967 to the present in HCAPLUS on STN.

=> d que 121

L1 16 SEA FILE=REGISTRY X{0-7}PVAPTQX{0-7}|X{0-7}QQTAPKAPT{0-7}|VSTP
VAPTQ|QQQTAPKAPTE|STPVAPTQEVKK|PVAPTQEVKK/SQSP
L2 8 SEA FILE=HCAPLUS L1
L4 8457 SEA FILE=MEDLINE (LISTEREMIA/BI OR LISTERI/BI OR LISTERIA/BI
OR LISTERIAAGGLUTININE/BI OR LISTERIAAHNLICHER/BI OR LISTERIACA
/BI OR LISTERIACAUSED/BI OR LISTERIACIDAL/BI OR LISTERIAE/BI
OR LISTERIAINFEKSJON/BI OR LISTERIAINFEKTIONER/BI OR LISTERIAL/
BI OR LISTERIAMENINGIITTI/BI OR LISTERIAMONOCYTOGENES/BI OR
LISTERIAN/BI OR LISTERIANA/BI OR LISTERIAPHAGE/BI OR LISTERIAPH
AGES/BI OR LISTERIAS/BI OR LISTERIASEPSIS/BI OR LISTERIASIS/BI
OR LISTERIC/BI OR LISTERICA/BI OR LISTERICIDAL/BI OR LISTERICID
IN/BI OR LISTERICIDINS/BI OR LISTERICO/BI OR LISTERIEN/BI OR
LISTERIENABORT/BI OR LISTERIENAPPLIKATIONEN/BI OR LISTERIENAUS
CHEIDER/BI OR LISTERIENBEDINGTEN/BI OR LISTERIENBESIEDLUNG/BI
OR LISTERIENDIAGNOSTIK/BI OR LISTERIENE/BI OR LISTERIENENZEPHAL
ITIS/BI OR LISTERIENHEPATITIS/BI OR LISTERIENINFEKTION/BI OR
LISTERIENMENINGITIS/BI OR LISTERIENMENINGOENZEPHALITIS/BI OR
LISTERIENNACHWEIS/BI OR LISTERIENNE/BI OR LISTERIENNES/BI OR
LISTERIENSEPSIS/BI OR LISTERIENSTAMME/BI OR LISTERIENSTAMMEN/BI
OR LISTERIENUNTERSUCHUNGEN/BI OR LISTERII/BI OR LISTERIIA/BI
OR LISTERIIAM/BI OR LISTERIIAMI/BI OR LISTERIIAMY/BI OR
LISTERIINOGO/BI OR LISTERIINUUIU/BI OR LISTERIINYKH/BI OR
LISTERIITE/BI OR LISTERIJOM/BI OR LISTERINE/BI OR LISTERIO/BI
OR LISTERIOCIDAL/BI OR LISTERIOCINS/BI OR LISTERIOLIZINA/BI OR
LISTERIOLYSIN/BI OR LISTERIOLYSINE/BI OR LISTERIOLYSINS/BI OR

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L5          32 SEA FILE=MEDLINE L4 AND ((INVAS? (3A) ASSOC) OR IAP?)
L6          2 SEA FILE=WPIDS L4 AND ((INVAS? (3A) ASSOC) OR IAP?)
L7          38 SEA FILE=BIOSIS L4 AND ((INVAS? (3A) ASSOC) OR IAP?)
L10         582538 SEA FILE=BIOSIS ANTIBOD? OR IMMUNOGLOBULIN# OR IMMUNOGEN? OR
EPIPOPE#
L11          5 SEA FILE=BIOSIS L7 AND L10
L12         28 SEA FILE=USPATFULL L4 AND ((INVAS? (3A) ASSOC) OR IAP?)
L14         27 SEA FILE=USPATFULL L12 (5A) L10
L15        1021125 SEA FILE=BIOSIS (*10064 OR *10054)/CC
L16          5 SEA FILE=BIOSIS L15 AND L7
L17          3 SEA FILE=BIOSIS 00520/CC AND L7
L18          3 SEA FILE=BIOSIS CONFERENCE/DT AND L7
L19          3 SEA FILE=BIOSIS (CONGRESS? OR CONFERENCE? OR POSTER? OR
SYMPOSI? OR MEETING? OR ASSEMBLY OR WORKSHOP OR COLLOQI? OR
SESSION? OR TRANSACT? OR SEMINAR# OR ABSTRACT# OR PROCEED?)/DT,
SO,ST,BI AND L7
L20         12 SEA FILE=BIOSIS L11 OR (L16 OR L17 OR L18 OR L19)
L21         71 DUP REM L5 L2 L14 L6 L20 (10 DUPLICATES REMOVED)

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=> d bib abs l21 1-71

YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS, MEDLINE, WPIDS, USPATFULL, BIOSIS' -
CONTINUE? (Y)/N:y

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L21  ANSWER 1 OF 71  USPATFULL
AN    2000:160582  USPATFULL
TI    Destruction of the epithelium of an exocrine gland in the prophylactic
and therapeutic treatment of cancer
IN    Sukumar, Saraswati Vaidyanathan, Columbia, MD, United States
PA    John Hopkins University School of Medicine, Baltimore, MD, United States
      (U.S. corporation)
PI    US 6153184  20001128
AI    US 1998-93145  19980608 (9)
RLI   Division of Ser. No. US 1996-692001, filed on 2 Aug 1996, now patented,
Pat. No. US 5763415
DT    Utility
EXNAM  Primary Examiner: Priebe, Scott D.; Assistant Examiner: Nguyen, Dave
      Trong
LREP   Leydig, Voit & Mayer, Ltd.
CLMN   Number of Claims: 31
ECL    Exemplary Claim: 1

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DRWN 1 Drawing Figure(s); 1 Drawing Page(s)

LN.CNT 766

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides prophylactic and therapeutic methods of treating the ductal epithelium of an exocrine gland, in particular a mammary gland, for disease, in particular cancer. The methods comprise contacting the ductal epithelium of the exocrine gland with an epithelium-destroying agent, preferably by ductal cannulation, so as to realize a prophylactic or therapeutic effect.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L21 ANSWER 2 OF 71 USPATFULL

AN 2000:149971 USPATFULL

TI Delivery of polypeptide-encoding plasmid DNA into the cytosol of macrophages by attenuated *listeria* suicide bacteria

IN Goebel, Werner, Gerbrunn, Germany, Federal Republic of

PA Schering Aktiengesellschaft, Berlin, Germany, Federal Republic of (non-U.S. corporation)

PI US 6143551 20001107

AI US 1997-999391 19971229 (8)

DT Utility

EXNAM Primary Examiner: Crouch, Deborah; Assistant Examiner: Beckerleg, Anne Marie S.

LREP Millen, White, Zelano, & Branigan, P.C.

CLMN Number of Claims: 14

ECL Exemplary Claim: 1

DRWN 5 Drawing Figure(s); 2 Drawing Page(s)

LN.CNT 930

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to the introduction of DNA or RNA sequences into a mammalian cell to achieve controlled expression of a polypeptide. It is therefore useful in gene therapy, vaccination, and any therapeutic situation in which a polypeptide should be administered to a host or cells of said host, as well as for the production of polypeptides by mammalian cells, e.g., in culture or in transgenic animals.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L21 ANSWER 3 OF 71 USPATFULL

AN 2000:141509 USPATFULL

TI Human immune system associated molecules

IN Hillman, Jennifer L., Mountain View, CA, United States

Lal, Preeti, Sunnyvale, CA, United States

Tang, Y. Tom, Sunnyvale, CA, United States

Yue, Henry, Sunnyvale, CA, United States

Au-Young, Janice, Berkeley, CA, United States

Corley, Neil C., Mountain View, CA, United States

Guegler, Karl J., Menlo Park, CA, United States

Baughn, Mariah R., San Jose, CA, United States

PA Incyte Pharmaceuticals, Inc., Palo Alto, CA, United States (U.S. corporation)

PI US 6135941 20001024

AI US 1998-49672 19980327 (9)

DT Utility

EXNAM Primary Examiner: Burke, Julie

LREP Incyte Pharmaceuticals, Inc.
CLMN Number of Claims: 17
ECL Exemplary Claim: 1
DRWN 3 Drawing Figure(s); 3 Drawing Page(s)
LN.CNT 3879

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides human immune system associated proteins (HISAP) and polynucleotides which identify and encode HISAP. The invention also provides expression vectors, host cells, **antibodies**, agonists, and antagonists. The invention also provides methods for treating or preventing disorders associated with expression of HISAP.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L21 ANSWER 4 OF 71 USPATFULL

AN 2000:95093 USPATFULL

TI Isolated peptides derived from the Epstein-Barr virus containing fusion inhibitory domains

IN Barney, Shawn O'Lin, Cary, NC, United States
Lambert, Dennis Michael, Cary, NC, United States
Petteway, Stephen Robert, Cary, NC, United States

PA Trimeris, Inc., Durham, NC, United States (U.S. corporation)

PI US 6093794 20000725

AI US 1995-471913 19950607 (8)

RLI Division of Ser. No. US 1995-470896, filed on 6 Jun 1995 which is a continuation-in-part of Ser. No. US 1994-360107, filed on 20 Dec 1994 which is a continuation-in-part of Ser. No. US 1994-255208, filed on 7 Jun 1994 which is a continuation-in-part of Ser. No. US 1993-73028, filed on 7 Jun 1993, now patented, Pat. No. US 5464933

DT Utility

EXNAM Primary Examiner: Scheiner, Laurie; Assistant Examiner: Parkin, Jeffrey S.

LREP Pennie & Edmonds LLP

CLMN Number of Claims: 27

ECL Exemplary Claim: 1

DRWN 52 Drawing Figure(s); 83 Drawing Page(s)

LN.CNT 19949

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to peptides which exhibit potent anti-retroviral activity. The peptides of the invention comprise DP178 (SEQ ID:1) peptide corresponding to amino acids 638 to 673 of the HIV-1.sub.LAI gp41 protein, and fragments, analogs and homologs of DP178. The invention further relates to the uses of such peptides as inhibitory of human and non-human retroviral, especially HIV, transmission to uninfected cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L21 ANSWER 5 OF 71 USPATFULL

AN 2000:91706 USPATFULL

TI Detection of bacteria of genus **Listeria** using nucleic probe hybridization techniques

IN Mabilat, Claude, Rilleux-la-Pape, France
Sallen, Brunehild, Lyons, France

PA Bio Merieux, Marcy l'Etoile, France (non-U.S. corporation)

PI US 6090551 20000718

WO 9624686 19960815
AI US 1997-875296 19970929 (8)
WO 1996-FR202 19960207
19970929 PCT 371 date
19970929 PCT 102(e) date
PRAI FR 1995-1431 19950208
DT Utility
EXNAM Primary Examiner: Myers, Carla J.
LREP Oliff & Berridge, PLC
CLMN Number of Claims: 24
ECL Exemplary Claim: 1,6
DRWN No Drawings
LN.CNT 1408

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A single-stranded nucleotide fragment belonging to a variable region of the ribosomal RNA 23S of species of the genus mycobacterium. Probes and primers with sequences belonging to those of the single-stranded nucleotide fragments, a reagent and a method for identifying the mycobacterial species.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L21 ANSWER 6 OF 71 USPATFULL
AN 2000:67564 USPATFULL
TI Methods for inhibition of membrane fusion-associated events, including influenza virus
IN Barney, Shawn O'Lin, Cary, NC, United States
Lambert, Dennis Michael, Cary, NC, United States
Petteway, Stephen Robert, Cary, NC, United States
PA Trimeris, Inc., Durham, NC, United States (U.S. corporation)
PI US 6068973 20000530
AI US 1995-485551 19950607 (8)
RLI Division of Ser. No. US 1995-470896, filed on 6 Jun 1995 which is a continuation-in-part of Ser. No. US 1994-360107, filed on 20 Dec 1994 which is a continuation-in-part of Ser. No. US 1994-255208, filed on 7 Jun 1994 which is a continuation-in-part of Ser. No. US 1993-73028, filed on 7 Jun 1993, now patented, Pat. No. US 5464933
DT Utility
EXNAM Primary Examiner: Park, Hankyel
LREP Pennie & Edmonds LLP
CLMN Number of Claims: 5
ECL Exemplary Claim: 1
DRWN 52 Drawing Figure(s); 83 Drawing Page(s)
LN.CNT 12021

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to peptides which exhibit potent anti-retroviral activity. The peptides of the invention comprise DP178 (SEQ ID:1) peptide corresponding to amino acids 638 to 673 of the HIV-1.sub.LAI gp41 protein, and fragments, analogs and homologs of DP178. The invention further relates to the uses of such peptides as inhibitory of human and non-human retroviral, especially HIV, transmission to uninfected cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L21 ANSWER 7 OF 71 USPATFULL

AN 2000:57361 USPATFULL
 TI Compositions for inhibition of membrane fusion-associated events,
 including influenza virus transmission
 IN Barney, Shawn O'Lin, Cary, NC, United States
 Lambert, Dennis Michael, Cary, NC, United States
 Petteway, Stephen Robert, Cary, NC, United States
 PA Trimeris, Inc., Durham, NC, United States (U.S. corporation)
 Duke University, Durham, NC, United States (U.S. corporation)
 PI US 6060065 20000509
 AI US 1995-475668 19950607 (8)
 RLI Division of Ser. No. US 1995-470896, filed on 6 Jun 1995 which is a
 continuation-in-part of Ser. No. US 1994-360107, filed on 20 Dec 1994
 which is a continuation-in-part of Ser. No. US 1994-255208, filed on 7
 Jun 1994 which is a continuation-in-part of Ser. No. US 1993-73028,
 filed on 7 Jun 1993, now patented, Pat. No. US 5464933
 DT Utility
 EXNAM Primary Examiner: Achutamurthy, Ponnathapura; Assistant Examiner:
 Parley, Hankyel T.
 LREP Pennie & Edmonds, LLP
 CLMN Number of Claims: 5
 ECL Exemplary Claim: 1
 DRWN 84 Drawing Figure(s); 83 Drawing Page(s)
 LN.CNT 19987
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 AB The present invention relates to viral peptides referred to as "DP107-
 and DP178-like" peptides. Specifically, the invention relates to
 isolated influenza A DP107- and DP178-like peptides which are identified
 by sequence search motif algorithms. The peptides of the invention
 exhibit antiviral activity believed to result from inhibition of viral
 induced fusogenic events.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L21 ANSWER 8 OF 71 USPATFULL
 AN 2000:50515 USPATFULL
 TI Screening assays for compounds that inhibit membrane fusion-associated
 events
 IN Barney, Shawn O'Lin, Cary, NC, United States
 Lambert, Dennis Michael, Cary, NC, United States
 Petteway, Jr., Stephen Robert, Cary, NC, United States
 PA Trimeris, Inc., Durham, NC, United States (U.S. corporation)
 PI US 6054265 20000425
 AI US 1997-919597 19970926 (8)
 RLI Division of Ser. No. US 1995-470896, filed on 6 Jun 1995 which is a
 continuation-in-part of Ser. No. US 1994-360107, filed on 20 Dec 1994
 which is a continuation-in-part of Ser. No. US 1994-255208, filed on 7
 Jun 1994 which is a continuation-in-part of Ser. No. US 1993-73028,
 filed on 7 Jun 1993, now patented, Pat. No. US 5464933
 DT Utility
 EXNAM Primary Examiner: Stucker, Jeffrey
 LREP Pennie & Edmonds, LLP
 CLMN Number of Claims: 1
 ECL Exemplary Claim: 1
 DRWN 83 Drawing Figure(s); 83 Drawing Page(s)
 LN.CNT 21307
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to peptides which exhibit potent anti-retroviral activity. The peptides of the invention comprise DP178 (SEQ ID:1) peptide corresponding to amino acids 638 to 673 of the HIV-1.sub.LAI gp41 protein, and fragments, analogs and homologs of DP178. The invention further relates to the uses of such peptides as inhibitory of human and non-human retroviral, especially HIV, transmission to uninfected cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L21 ANSWER 9 OF 71 USPATFULL
 AN 2000:18218 USPATFULL
 TI Probes targeted to rRNA spacer regions, methods and kits for using said probes, for the detection of respiratory tract pathogens
 IN Jannes, Geert, Kessel-Lo, Belgium
 Rossau, Rudi, Ekeren, Belgium
 Van Heuverswyn, Hugo, Kalken, Belgium
 PA Innogenetics N.V., Ghent, Belgium (non-U.S. corporation)
 PI US 6025132 20000215
 WO 9600298 19960104
 AI US 1996-765332 19961223 (8)
 WO 1995-EP2452 19950623
 19961223 PCT 371 date
 19961223 PCT 102(e) date
 PRAI EP 1994-870106 19940624
 EP 1995-870032 19950407
 DT Utility
 EXNAM Primary Examiner: Horlick, Kenneth R.
 LREP Nixon & Vanderhye P.C.
 CLMN Number of Claims: 32
 ECL Exemplary Claim: 1
 DRWN 103 Drawing Figure(s); 103 Drawing Page(s)
 LN.CNT 6360

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a method for detection and identification of at least one microorganism, or for the simultaneous detection of several microorganisms in a sample, comprising the steps of: (i) if need be releasing, isolating or concentrating the polynucleic acids present in the sample; (ii) if need be amplifying the 16S-23S rRNA spacer region, or a part of it, with at least one suitable primer pair, (iii) hybridizing the polynucleic acids of step (i) or (ii) with at least one and preferably more than one of the spacer probes as mentioned in table 1a or equivalents of thereof, under the appropriate hybridization and wash conditions, and/or with a taxon-specific probe derived from any of the spacer sequences as represented in FIGS. 1-103 under the same hybridization and wash conditions; (iv) detecting the hybrids formed in step (iii) with each of the probes used under appropriate hybridization and wash conditions; (v) identification of the microorganism(s) present in the sample from the differential hybridization signals obtained in step (iv).

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L21 ANSWER 10 OF 71 USPATFULL
 AN 2000:12922 USPATFULL
 TI Isolated peptides derived from human immunodeficiency virus types 1 and

2 containing fusion inhibitory domains
 IN Barney, Shawn O'Lin, Cary, NC, United States
 Lambert, Dennis Michael, Cary, NC, United States
 Petteway, Stephen Robert, Cary, NC, United States
 PA Trimeris, Inc., Durham, NC, United States (U.S. corporation)
 PI US 6020459 20000201
 AI US 1995-484223 19950607 (8)
 RLI Division of Ser. No. US 1995-470896, filed on 6 Jun 1995 which is a continuation-in-part of Ser. No. US 1994-360107, filed on 20 Dec 1994 which is a continuation-in-part of Ser. No. US 1994-255208, filed on 7 Jun 1994 which is a continuation-in-part of Ser. No. US 1993-73028, filed on 7 Jun 1993, now patented, Pat. No. US 5464933
 DT Utility
 EXNAM Primary Examiner: Scheiner, Laurie; Assistant Examiner: Parkin, Jeffrey S.
 LREP Pennie & Edmonds LLP
 CLMN Number of Claims: 75
 ECL Exemplary Claim: 1
 DRWN 52 Drawing Figure(s); 83 Drawing Page(s)
 LN.CNT 20335
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 AB The present invention relates to peptides which exhibit potent anti-retroviral activity. The peptides of the invention comprise DP178 (SEQ ID:1) peptide corresponding to amino acids 638 to 673 of the HIV-1.sub.LAI gp41 protein, and fragments, analogs and homologs of DP178. The invention further relates to the uses of such peptides as inhibitory of human and non-human retroviral, especially HIV, transmission to uninfected cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L21 ANSWER 11 OF 71 USPATFULL
 AN 2000:9527 USPATFULL
 TI Simian immunodeficiency virus peptides with antifusogenic and antiviral activities
 IN Barney, Shawn O'Lin, Cary, NC, United States
 Lambert, Dennis Michael, Cary, NC, United States
 Petteway, Stephen Robert, Cary, NC, United States
 Langlois, Alphonse J., Durham, NC, United States
 PA Trimeris, Inc., Durham, NC, United States (U.S. corporation)
 PI US 6017536 20000125
 AI US 1994-360107 19941220 (8)
 RLI Continuation-in-part of Ser. No. US 1994-255208, filed on 7 Jun 1994 which is a continuation-in-part of Ser. No. US 1993-73028, filed on 7 Jun 1993, now patented, Pat. No. US 5464933
 DT Utility
 EXNAM Primary Examiner: Scheiner, Laurie; Assistant Examiner: Parkin, Jeffrey S.
 LREP Pennie & Edmonds LLP
 CLMN Number of Claims: 28
 ECL Exemplary Claim: 1
 DRWN 50 Drawing Figure(s); 62 Drawing Page(s)
 LN.CNT 20227
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 AB The present invention relates to peptides which exhibit antifusogenic and antiviral activities. The peptides of the invention consist of a 16

to 39 amino acid region of a simian immunodeficiency virus (SIV) protein. These regions were identified through computer algorithms capable of recognizing the ALLMOTI5, 107.times.178.times.4, or PLZIP amino acid motifs. These motifs are associated with the antifusogenic and antiviral activities of the claimed peptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L21 ANSWER 12 OF 71 USPATFULL
 AN 2000:4427 USPATFULL
 TI Measles virus peptides with antifusogenic and antiviral activities
 IN Barney, Shawn O'Lin, Cary, NC, United States
 Lambert, Dennis Michael, Cary, NC, United States
 Petteway, Stephen Robert, Cary, NC, United States
 PA Trimeris, Inc., Durham, NC, United States (U.S. corporation)
 PI US 6013263 20000111
 AI US 1995-486099 19950607 (8)
 RLI Division of Ser. No. US 1995-470896, filed on 6 Jun 1995 which is a continuation-in-part of Ser. No. US 1994-360107, filed on 20 Dec 1994 Ser. No. Ser. No. US 1994-255208, filed on 7 Jun 1994 And Ser. No. US 1993-73028, filed on 7 Jun 1993, now patented, Pat. No. US 5464933
 DT Utility
 EXNAM Primary Examiner: Scheiner, Laurie; Assistant Examiner: Parkin, Jeffrey S.
 LREP Pennie & Edmonds LLP
 CLMN Number of Claims: 38
 ECL Exemplary Claim: 1
 DRWN 52 Drawing Figure(s); 83 Drawing Page(s)
 LN.CNT 19827

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to peptides which exhibit potent anti-retroviral activity. The peptides of the invention comprise DP178 (SEQ ID:1) peptide corresponding to amino acids 638 to 673 of the HIV-1.sub.LAI gp41 protein, and fragments, analogs and homologs of DP178. The invention further relates to the uses of such peptides as inhibitory of human and non-human retroviral, especially HIV, transmission to uninfected cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L21 ANSWER 13 OF 71 USPATFULL
 AN 2000:1692 USPATFULL
 TI Sequence-directed DNA binding molecules compositions and methods
 IN Edwards, Cynthia A., Menlo Park, CA, United States
 Cantor, Charles R., Boston, MA, United States
 Andrews, Beth M., Maynard, MA, United States
 Turin, Lisa M., Redwood City, CA, United States
 Fry, Kirk E., Palo Alto, CA, United States
 PA Genelabs Technologies, Inc., Redwood, CA, United States (U.S. corporation)
 PI US 6010849 20000104
 AI US 1995-482080 19950607 (8)
 RLI Division of Ser. No. US 1993-171389, filed on 20 Dec 1993, now patented, Pat. No. US 5578444 which is a continuation-in-part of Ser. No. US 1993-123936, filed on 17 Sep 1993, now patented, Pat. No. US 5726014 which is a continuation-in-part of Ser. No. US 1992-996783, filed on 23

Dec 1992, now patented, Pat. No. US 5693463 which is a continuation-in-part of Ser. No. US 1991-723618, filed on 27 Jun 1991, now abandoned

DT Utility

EXNAM Primary Examiner: Degen, Nancy; Assistant Examiner: Schwartzman, Robert

LREP Fabin, Gary R. Dehlinger & Associates

CLMN Number of Claims: 11

ECL Exemplary Claim: 1

DRWN 48 Drawing Figure(s); 47 Drawing Page(s)

LN.CNT 10022

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention defines a DNA:protein-binding assay useful for screening libraries of synthetic or biological compounds for their ability to bind DNA test sequences. The assay is versatile in that any number of test sequences can be tested by placing the test sequence adjacent to a defined protein binding screening sequence. Binding of molecules to these test sequence changes the binding characteristics of the protein molecule to its cognate binding sequence. When such a molecule binds the test sequence the equilibrium of the DNA:protein complexes is disturbed, generating changes in the concentration of free DNA probe. Numerous exemplary target test sequences (SEQ ID NO:1 to SEQ ID NO:600) are set forth. The assay of the present invention is also useful to characterize the preferred binding sequences of any selected DNA-binding molecule.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L21 ANSWER 14 OF 71 HCAPLUS COPYRIGHT 2001 ACS

AN 2000:246831 HCAPLUS

DN 132:275066

TI The genome sequence of Drosophila melanogaster

AU Adams, Mark D.; Celniker, Susan E.; Holt, Robert A.; Evans, Cheryl A.; Gocayne, Jeannine D.; Amanatides, Peter G.; Scherer, Steven E.; Li, Peter W.; Hoskins, Roger A.; Galle, Richard F.; George, Reed A.; Lewis, Suzanna E.; Richards, Stephen; Ashburner, Michael; Henderson, Scott N.; Sutton, Granger G.; Wortman, Jennifer R.; Yandell, Mark D.; Zhang, Qing; Chen, Lin X.; Brandon, Rhonda C.; Rogers, Yu-Hui C.; Blazej, Robert G.; Champe, Mark; Pfeiffer, Barret D.; Wan, Kenneth H.; Doyle, Clare; Baxter, Evan G.; Helt, Gregg; Nelson, Catherine R.; Miklos, George L. Gabor; Abril, Josep F.; Agbayani, Anna; An, Hui-Jin; Andrews-Pfannkoch, Cynthia; Baldwin, Danita; Ballew, Richard M.; Basu, Anand; Baxendale, James; Bayraktaroglu, Leyla; Beasley, Ellen M.; Beeson, Karen Y.; Benos, P. V.; Berman, Benjamin P.; Bhandari, Deepali; Bolshakov, Slava; Borkova, Dana; Botchan, Michael R.; Bouck, John; Brokstein, Peter; Brottier, Phillipe; Burtis, Kenneth C.; et al.

CS Celera Genomics, Rockville, MD, 20850, USA

SO Science (Washington, D. C.) (2000), 287(5461), 2185-2195
CODEN: SCIEAS; ISSN: 0036-8075

PB American Association for the Advancement of Science

DT Journal

LA English

AB The fly Drosophila melanogaster is one of the most intensively studied organisms in biol. and serves as a model system for the investigation of many developmental and cellular processes common to higher eukaryotes, including humans. The nucleotide sequence was detd. of nearly all of the .apprx.120-megabase euchromatic portion of the Drosophila genome using a

whole-genome shotgun sequencing strategy supported by extensive clone-based sequence and a high-quality bacterial artificial chromosome phys. map. Efforts are under way to close the remaining gaps; however, the sequence is of sufficient accuracy and contiguity to be declared substantially complete and to support an initial anal. of genome structure and preliminary gene annotation and interpretation. The genome encodes .apprx.13,600 genes, somewhat fewer than the smaller *Caenorhabditis elegans* genome, but with comparable functional diversity. Access to supporting information on each gene is available through FlyBase at <http://flybase.bio.indiana.edu> and through Celera at www.celera.com; the sequences are deposited in GenBank with Accession Nos. AE002566-AE003403. [This abstr. record is one of 4 records for this document necessitated by the large no. of index entries required to fully index the document and publication system constraints.].

L21 ANSWER 15 OF 71 HCAPLUS COPYRIGHT 2001 ACS

AN 2000:636908 HCAPLUS

DN 133:262066

TI Complete genome sequence of *Pseudomonas aeruginosa* PA01

AU Stover, C. K.; Pham, X. Q.; Erwin, A. L.; Mizoguchi, S. D.; Warrenner, P.; Hickey, M. J.; Brinkman, F. S. L.; Hufnagle, W. O.; Kowalik, J.; Lagrou, M.; Garber, R. L.; Goltry, L.; Tolentino, E.; Westbrook-Wadman, S.; Yuan, Y.; Brody, L. L.; Coulter, S. N.; Folger, K. R.; Kas, A.; Larbig, K.; Lim, R.; Smith, K.; Spencer, D.; Wong, G. K.-S.; Wu, Z.; Paulsen, I. T.; Reizer, J.; Saier, M. H.; Hancock, R. E. W.; Lory, S.; Olson, M. V.

CS PathoGenesis Corporation, Seattle, WA, 98119, USA

SO Nature (London) (2000), 406(6799), 959-964

CODEN: NATUAS; ISSN: 0028-0836

PB Nature Publishing Group

DT Journal

LA English

AB *Pseudomonas aeruginosa* is a ubiquitous environmental bacterium that is one of the top three causes of opportunistic human infections. A major factor in its prominence as a pathogen is its intrinsic resistance to antibiotics and disinfectants. The authors now report the complete sequence of *P. aeruginosa* strain PA01. At 6.3 million base pairs, this is the largest bacterial genome sequenced, and the sequence provides insights into the basis of the versatility and intrinsic drug resistance of *P. aeruginosa*. Consistent with its larger genome size and environmental adaptability, *P. aeruginosa* contains the highest proportion of regulatory genes obsd. for a bacterial genome and a large no. of genes involved in the catabolism, transport and efflux of org. compds. as well as four potential chemotaxis systems. The size and complexity of the *P. aeruginosa* genome is proposed to reflect an evolutionary adaptation permitting it to thrive in diverse environments and resist the effects of a variety of antimicrobial substances. The genome and protein sequences are deposited in the GenBank database with Accession No. AE004091, as well at the web site <http://www.pseudomonas.com>.

RE.CNT 44

RE

(2) Altschul, S; Nucleic Acids Res 1997, V25, P3389 HCAPLUS

(3) Armitage, J; Microbiology 1997, V143, P3671 HCAPLUS

(4) Ball, C; Nucleic Acids Res 2000, V28, P77 HCAPLUS

(6) Blattner, F; Science 1997, V277, P1453 HCAPLUS

(7) Bleves, S; J Bacteriol 1999, V181, P4012 HCAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 16 OF 71 BIOSIS COPYRIGHT 2001 BIOSIS
 AN 2000:393457 BIOSIS
 DN PREV200000393457
 TI Detection of **Listeria** monocytogenes by fluorescence resonance energy transfer-based PCR with an inexpensive "asymmetric" fluorogenic probe set.
 AU Koo, K. (1); Jaykus, L. A. (1)
 CS (1) North Carolina State University, Raleigh, NC USA
 SO **Abstracts of the General Meeting of the American Society for Microbiology**, (2000) Vol. 100, pp. 515. print.
 Meeting Info.: **100th General Meeting of the American Society for Microbiology** Los Angeles, California, USA May 21-25, 2000 American Society for Microbiology
 . ISSN: 1060-2011.
 DT **Conference**
 LA English
 SL English

L21 ANSWER 17 OF 71 MEDLINE
 AN 2000179305 MEDLINE
 DN 20179305
 TI Single-strand conformation polymorphisms in the hly gene and polymerase chain reaction analysis of a repeat region in the **iap** gene to identify and type **Listeria** monocytogenes.
 AU Wagner M; Lehner A; Klein D; Buber A
 CS Institute for Milk Hygiene, Milk Technology, and Food Science, University of Veterinary Medicine, Vienna, Austria.
 SO JOURNAL OF FOOD PROTECTION, (2000 Mar) 63 (3) 332-6.
 Journal code: C48. ISSN: 0362-028X.
 CY United States
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 200006
 EW 20000605
 AB Two novel methods that allow the powerful identification of **Listeria** monocytogenes by polymerase chain reaction (PCR) and simultaneous differentiation by special electrophoresis formats are described. The first method involves a PCR-driven single-strand conformation polymorphism (SSCP-PCR) assay using a portion of the noncoding region of the hly gene. The assay was evaluated with 120 genetically distinct L. monocytogenes strains of either foodborne or clinical origin. Distribution of **listerial** strains to at least 14 SSCP types was observed. In respect to the panel of strains, 39.7% were assigned to SSCP type 3, and 19% showed SSCP type 5. Further, SSCP type 1 was found in 7.5% of all strains, SSCP type 10 in 6.7%, and 5.8% each for SSCP types 6 and 7. The SSCP types 4, 9, and 11 were infrequently described in 2.55%, 3.3%, and 4.2%, respectively, of all isolates. At least 0.85% represented each of the SSCP types 2, 13, and 14, and 1.7% displayed SSCP types 8 and 12. In the second method, the internal threonine-asparagine repeat portion of the L. monocytogenes p60 protein was used for setting up a PCR-based identification and parallel differentiation assay. Ten different repeat types (RTs), according to different sizes of PCR products, were observed. Of 163 strains tested, 35.58% of samples were assigned to RT 1, 39.26% to RT 2, 3.68% to RT 3,

6.13% to RT 4, 4.29% to RT 5, 2.45% to RT 6, 5.52% to RT 7, 0.61% to RT 8, 0.61% to RT 9, and 1.83% to RT 10. The data suggest that both methods allow the simple identification and differentiation of *L. monocytogenes* isolates. Therefore, both the SSCP-PCR and the PCR-based identification and parallel differentiation assay could represent single-strand pretyping assays before laborious reference typing methods are applied.

L21 ANSWER 18 OF 71 MEDLINE
 AN 2000493653 MEDLINE
 DN 20329087
 TI Characterization of *iap* gene in *Listeria monocytogenes* strains isolated in Japan.
 AU Saito A; Ueda F; Sawada T; Hondo R
 CS Division of Food Microbiology, Saitama Institute of Public Health, Urawa, Japan.
 SO NEW MICROBIOLOGICA, (2000 Apr) 23 (2) 159-65.
 Journal code: CGC. ISSN: 1121-7138.
 CY Italy
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 200012
 EW 20001204
 AB Variation of the *iap* gene region (407bp) encoding an invasion-associated protein p60 was studied on 12 strains of *Listeria monocytogenes* of different origin in Japan. These 12 strains are known to have 2 types of serotype (1/2a and 4b) and have a diversity among the strains (Saito et al., 1998). The dye-primer cycle sequencing method was employed to determine the genomic structure, and the nucleotide sequences obtained were compared with those of reference strain SV 1/2a EGD. Differences found in the nucleotides were as follows; point mutations of 33 variations in 32 places; an insertion and 3 deletions of 3 bases; AAT position (po.) 1282-1283, and GCA po. 1307-1309, ACA po. 1412-1414, AAT po. 1439-1444, respectively. Different repeating numbers by 6 base unit, ACA AAT, were also found in the tandem repeat region (po. 1394-1423). Classification of 12 strains was attempted, then 8, 4 and 5 types were obtained from the point mutations, the insertions and deletions, and the repeating numbers, respectively. Consequently, 8 patterns were profiled regardless of each serotype. From these results, genomic structures were partially clarified in the *iap* gene 407bp of *L. monocytogenes* isolated in Japan. Then, the possibility of detailed epidemiology for *L. monocytogenes* infection using a combination of serotype and genome structure was suggested because of the previous polymorphism thought to be due to the nucleotide differences in the region.

L21 ANSWER 19 OF 71 MEDLINE DUPLICATE 1
 AN 2000395697 MEDLINE
 DN 20243457
 TI Specific binding of recombinant *Listeria monocytogenes* p60 protein to Caco-2 cells.
 AU Park J H; Lee Y S; Lim Y K; Kwon S H; Lee C U; Yoon B S
 CS Peptide Engineering Research Unit, Korea Research Institute of Bioscience and Biotechnology, Yusong, P.O. Box 115, Taejeon, South Korea.
 SO FEMS MICROBIOLOGY LETTERS, (2000 May 1) 186 (1) 35-40.
 Journal code: FML. ISSN: 0378-1097.

CY Netherlands
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 200010
 EW 20001003
 AB The *Listeria monocytogenes* p60 is a major extracellular protein, which is believed to be involved in the invasion of these bacteria into their host cells. So far the mechanism by which p60 participates in the internalization or penetration of *L. monocytogenes* is still veiled. To determine the possibility of a direct interaction of p60 with the host cell surface, the *iap* gene was recombinantly expressed in *Escherichia coli* and used for binding studies with the enterocyte-like Caco-2 cells. Fluorescence activated flow cytometry and confocal laser scanning microscopy revealed a cell membrane specific staining with p60, which implications in *Listeria* virulence are discussed.

L21 ANSWER 20 OF 71 USPATFULL
 AN 1999:132784 USPATFULL
 TI Apoptosis induced by Shigella IpaB
 IN Zychlinsky, Arturo, New York, NY, United States
 Chen, Yajing, Elmhurst, NY, United States
 PA New York University, New York, NY, United States (U.S. corporation)
 PI US 5972899 19991026
 AI US 1996-591079 19960125 (8)
 DT Utility
 EXNAM Primary Examiner: Priebe, Scott D.
 LREP Shmuel Livnat Rader Fishman & Grauer
 CLMN Number of Claims: 20
 ECL Exemplary Claim: 1
 DRWN 6 Drawing Figure(s); 5 Drawing Page(s)
 LN.CNT 3629

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Shigella IpaB protein or functional derivative binds to interleukin-1.β-converting enzyme (ICE) or an ICE homologue and activates a program of apoptosis. DNA encoding the Shigella IpaB protein, the IpaB protein or a functional derivative thereof is provided to a eukaryotic, preferably human, cell to induce apoptosis of that cell. This approach useful in treating diseases or disorders treatable by the eradication of unwanted cells, including cancer, autoimmunity, inflammation and chronic viral infections. Protein or peptide molecules (and the DNA coding therefor) which act as competitive antagonists for ICE binding without activating the apoptosis program are useful in treating or preventing diseases which involve an apoptotic mechanisms in their pathogenesis, for example AIDS, degenerative diseases such as Alzheimer's disease, myelodysplastic disorders, ischemic injuries or toxin-induced liver diseases. Various methods of gene therapy relying upon controlled expression of IpaB in a target cell are disclosed. Also provided are methods for: inhibiting the interaction of an apoptosis-inducing protein or peptide with ICE, detecting a compound capable of inhibiting the binding of IpaB to ICE or to an ICE homologue, screening a candidate protein or peptide for its ability to interact with IpaB in a cell, isolating from a complex mixture a compound capable of binding to IpaB protein

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L21 ANSWER 21 OF 71 USPATFULL
 AN 1999:88992 USPATFULL
 TI Processes and agents for detecting **listerias**
 IN Schubert, Peter, Darmstadt, Germany, Federal Republic of
 Neumann, Siegfried, Seeheim-Jugenheim, Germany, Federal Republic of
 Pawelzik, Martina, Munchen, Germany, Federal Republic of
 Linxweiler, Winfried, Gross-Umstadt, Germany, Federal Republic of
 Burger, Christa, Darmstadt, Germany, Federal Republic of
 Hofmann, Gottfried, Darmstadt, Germany, Federal Republic of
 Bubert, Andreas, Gerbrunn, Germany, Federal Republic of
 Goebel, Werner, Veitshochheim, Germany, Federal Republic of
 Kohler, Stefan, St. Clement de Reviere, France
 PA Merck Patent Gesellschaft Mit, Beschränkter Haftung, Germany, Federal
 Republic of (non-U.S. corporation)
 PI US 5932415 19990803
 AI US 1995-456670 19950601 (8)
 RLI Division of Ser. No. US 1995-412227, filed on 27 Mar 1995, now abandoned
 which is a continuation of Ser. No. US 1993-75248, filed on 11 Jun 1993,
 now abandoned
 PRAI DE 1992-4219111 19920611
 DE 1992-4239567 19921126
 DT Utility
 EXNAM Primary Examiner: Caputa, Anthony C.; Assistant Examiner: Navarro, Mark
 LREP Millen, White, Zelano, & Branigan, P.C.
 CLMN Number of Claims: 6
 ECL Exemplary Claim: 1
 DRWN 17 Drawing Figure(s); 7 Drawing Page(s)
 LN.CNT 1415
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 AB The invention relates to agents and processes for detecting bacteria of
 the genus **Listeria**, in particular *L. monocytogenes*. The agents
 according to the invention include primers whose sequence is selected
 from the **iap** gene of *L. monocytogenes*. In addition, the agents
 according to the invention include peptides whose sequence is selected
 from the p60 protein and which are suitable for producing specific
antibodies for the immunological detection of *L. monocytogenes*.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L21 ANSWER 22 OF 71 USPATFULL
 AN 1999:22085 USPATFULL
 TI Combinations and methods for reducing antimicrobial resistance
 IN Vermeulen, Nicolaas M. J., Woodinville, WA, United States
 Schwartz, Dennis E., Redmond, WA, United States
 PA Oridigm Corporation, Seattle, WA, United States (U.S. corporation)
 PI US 5872104 19990216
 AI US 1994-364246 19941227 (8)
 DT Utility
 EXNAM Primary Examiner: Peselev, Elli
 LREP Arnold, White & Durkee
 CLMN Number of Claims: 132
 ECL Exemplary Claim: 1
 DRWN 5 Drawing Figure(s); 5 Drawing Page(s)
 LN.CNT 4589
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed are novel methods, combinations of agents and kits for use in killing, or inhibiting the growth of, microorganisms. Enhanced antimicrobial action is provided by using a methylation inhibitor, as exemplified by using an agent that inhibits methylation or maturation of bacterial RNA in combination with, e.g., a macrolide lincosamide streptogramin B (MLS) antibiotic. The methods and compositions described may be employed to reduce the resistance of susceptible microorganisms to antimicrobial agents and thus to treat animals or patients with infections.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L21 ANSWER 23 OF 71 USPATFULL
 AN 1999:18912 USPATFULL
 TI Method of determining DNA sequence preference of a DNA-binding molecule
 IN Edwards, Cynthia A., Menlo Park, CA, United States
 Cantor, Charles R., Boston, MA, United States
 Andrews, Beth M., Maynard, MA, United States
 Turin, Lisa M., Redwood City, CA, United States
 Fry, Kirk E., Palo Alto, CA, United States
 PA Genelabs Technologies, Inc., Redwood City, CA, United States (U.S. corporation)
 PI US 5869241 19990209
 AI US 1995-475228 19950607 (8)
 RLI Division of Ser. No. US 1993-171389, filed on 20 Dec 1993, now patented, Pat. No. US 5578444 which is a continuation-in-part of Ser. No. US 1993-123936, filed on 17 Sep 1993, now patented, Pat. No. US 5726014 which is a continuation-in-part of Ser. No. US 1992-996783, filed on 23 Dec 1992, now patented, Pat. No. US 5693463 which is a continuation-in-part of Ser. No. US 1991-723618, filed on 27 Jun 1991, now abandoned
 DT Utility
 EXNAM Primary Examiner: Zitomer, Stephanie W.; Assistant Examiner: Whisenant, Ethan
 LREP Fabian, Gary R.; Stratford, Carol A.; Dehlinger, Peter J.
 CLMN Number of Claims: 11
 ECL Exemplary Claim: 1
 DRWN 72 Drawing Figure(s); 47 Drawing Page(s)
 LN.CNT 9840

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention defines a DNA:protein-binding assay useful for screening libraries of synthetic or biological compounds for their ability to bind DNA test sequences. The assay is versatile in that any number of test sequences can be tested by placing the test sequence adjacent to a defined protein binding screening sequence. Binding of molecules to these test sequence changes the binding characteristics of the protein molecule to its cognate binding sequence. When such a molecule binds the test sequence the equilibrium of the DNA:protein complexes is disturbed, generating changes in the concentration of free DNA probe. Numerous exemplary target test sequences (SEQ ID NO:1 to SEQ ID NO:600) are set forth. The assay of the present invention is also useful to characterize the preferred binding sequences of any selected DNA-binding molecule.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L21 ANSWER 24 OF 71 MEDLINE
 AN 1999437868 MEDLINE
 DN 99437868
 TI Detection and differentiation of *Listeria* spp. by a single reaction based on multiplex PCR.
 AU Bubert A; Hein I; Rauch M; Lehner A; Yoon B; Goebel W; Wagner M
 CS Lehrstuhl fur Mikrobiologie, Theodor-Boveri-Institut fur Biowissenschaften, Universitat Wurzburg, 97074 Wurzburg, Germany.. andreas.bubert@merck.de
 SO APPLIED AND ENVIRONMENTAL MICROBIOLOGY, (1999 Oct) 65 (10) 4688-92. Journal code: 6K6. ISSN: 0099-2240.
 CY United States
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 200001
 EW 20000104
 AB The *iap* gene encodes the protein p60, which is common to all *Listeria* species. A previous comparison of the DNA sequences indicated conserved and species-specific gene portions. Based on these comparisons, a combination consisting of only five different primers that allows the specific detection and differentiation of *Listeria* species with a single multiplex PCR and subsequent gel analysis was selected. One primer was derived from the conserved 3' end and is specific for all *Listeria* species; the other four primers are specific for *Listeria* monocytogenes, *L. innocua*, *L. grayi*, or the three grouped species *L. ivanovii*, *L. seeligeri*, and *L. welshimeri*, respectively. The PCR method, which also enables the simultaneous detection of *L. monocytogenes* and *L. innocua*, was evaluated against conventional biotyping with 200 food hygiene-relevant *Listeria* strains. The results indicated the superiority of this technique. Thus, this novel type of multiplex PCR may be useful for rapid *Listeria* species confirmation and for identification of *Listeria* species for strains isolated from different sources.

L21 ANSWER 25 OF 71 HCAPLUS COPYRIGHT 2001 ACS
 AN 2000:9181 HCAPLUS
 DN 132:89085
 TI Sequence and analysis of chromosome 2 of the plant *Arabidopsis thaliana*
 AU Lin, Xiaoying; Kaul, Samir; Rounsley, Steve; Shea, Terrance P.; Benito, Maria-Lnes; Town, Christopher D.; Fujii, Claire Y.; Mason, Tanya; Bowman, Cheryl L.; Barnstead, Mary; Feldblyum, Tamara V.; Buell, C. Robin; Ketchum, Karen A.; Lee, John; Ronning, Catherine M.; Koo, Hean L.; Moffat, Kelly S.; Cronin, Lisa A.; Shen, Mian; Pai, Grace; Van Aken, Susan; Umayam, Lowell; Tallon, Luke J.; Gill, John E.; Adams, Mark D.; Carrera, Ana J.; Creasy, Todd H.; Goodman, Howard M.; Somerville, Chris R.; Copenhaver, Greg P.; Preuss, Daphne; Nierman, William C.; White, Owen; Eisen, Jonathan A.; Salzberg, Steven L.; Fraser, Claire M.; Venter, J. Craig
 CS The Institute for Genomic Research, Rockville, MD, 20850, USA
 SO Nature (London) (1999), 402(6763), 760-768
 CODEN: NATUAS; ISSN: 0028-0836
 PB Macmillan Magazines
 DT Journal
 LA English
 AB *Arabidopsis thaliana* (*Arabidopsis*) is unique among plant model organisms

in having a small genome (130-140 Mb), excellent phys. and genetic maps, and little repetitive DNA. The sequence of chromosome 2 from the Columbia ecotype is reported in two gap-free assemblies (contigs) of 3.6 and 16 megabases (Mb). The latter represents the longest published stretch of uninterrupted DNA sequence assembled from any organism to date. Chromosome 2 represents 15% of the genome and encodes 4037 genes, 49% of which have no predicted function. Roughly 250 tandem gene duplications were found in addn. to large-scale duplications of about 0.5 and 4.5 Mb between chromosomes 2 and 1 and between chromosomes 2 and 4, resp. Sequencing of nearly 2 Mb within the genetically defined centromere revealed a low d. of recognizable genes, and a high d. and diverse range of vestigial and presumably inactive mobile elements. More unexpected is what appears to be a recent insertion of a continuous stretch of 75% of the mitochondrial genome into chromosome 2.

RE.CNT 23

RE

- (1) Brandes, A; Chromosome Res 1997, V5, P238 HCAPLUS
- (2) Burge, C; J Mol Biol 1997, V268, P78 HCAPLUS
- (4) Claros, M; Comput Appl Biosci 1994, V10, P685 HCAPLUS
- (5) Claros, M; Eur J Biochem 1996, V241, P779 HCAPLUS
- (6) Delcher, A; Nucleic Acids Res 1999, V27, P2369 HCAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 26 OF 71 MEDLINE

AN 1999200491 MEDLINE

DN 99200491

TI Differential expression of *Listeria monocytogenes* virulence genes in mammalian host cells.

AU Bubert A; Sokolovic Z; Chun S K; Papatheodorou L; Simm A; Goebel W

CS Lehrstuhl fur Mikrobiologie, Theodor-Boveri-Institut fur Biowissenschaften, Universitat Wurzburg, Germany.. andreas.bubert@merck.de

SO MOLECULAR AND GENERAL GENETICS, (1999 Mar) 261 (2) 323-36.

Journal code: NGP. ISSN: 0026-8925.

CY GERMANY: Germany, Federal Republic of

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 199907

EW 19990701

AB We have used RT-PCR and GFP-mediated fluorescence to analyse the regulation of PrfA-dependent virulence genes of *Listeria monocytogenes* during proliferation in mammalian host cells. Our data show that most of the PrfA-regulated virulence genes are more efficiently expressed, as measured by transcript levels, when *L. monocytogenes* is grown in macrophages and macrophage-like cells rather than in epithelial cells, hepatocytes or endothelial cells. The promoters for hly and plcA are predominantly activated within the phagosomal compartment, while those for actA and inlC are predominantly activated in the host cell cytosol. Expression of actA and plcB precedes that of inlC after infection of epithelial cells and macrophages. Little transcription of inlA or inlB is observed in epithelial cells and there is only slightly more in macrophages. In both cell types the level of transcription of the inlAB operon is lower than is seen under extracellular growth conditions in rich media, which is compatible with the assumption that InlA and InlB are not required during intracellular growth of the bacteria. Activation of the PrfA-independent *iap* promoter is also low during intracellular

growth, although the gene product (p60) is required for cell viability. The levels of the PrfA-dependent virulence gene transcripts do not correlate with the amount of prfA transcript present, which is low under all intracellular conditions analysed, suggesting that the prfA transcript is either highly unstable in bacteria that are growing intracellularly, or that the small amount of PrfA produced is highly activated by additional component(s).

L21 ANSWER 27 OF 71 MEDLINE

AN 2000220215 MEDLINE

DN 20220215

TI Intracellular growth of *Listeria monocytogenes* insertional mutant deprived of protein p60.

AU Wisniewski J M; Bielecki J E

CS Institute of Microbiology, Warsaw University, Poland.

SO ACTA MICROBIOLOGICA POLONICA, (1999) 48 (4) 317-29.

Journal code: 17I. ISSN: 0001-6195.

CY Poland

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 200007

EW 20000701

AB The study of the mutant strain described here demonstrates that several characteristics contribute to maximal virulence of pathogenic strains of *L. monocytogenes*. The invasion levels of *L. monocytogenes* JB1115, a p60-deficient strain, were the same as for the parent strain *L. monocytogenes* 1043S in J774 macrophage-like cells. The invasion level of *Listeria* strains in Int407 cells was 100 times lower than in J774 cells. In epithelial Int407 cells, the time of division of p60- strain *L. monocytogenes* JB1115 was 43% slower than for the parent strain. In this study, two lisosomotrophic agents, ammonium chloride and chlorquinoline were tested in experimental *L. monocytogenes* 1043S and p60-deprived mutant JB1115 infection in both cell lines. The presence of ammonium chloride increased the level of infection (calculated as number of gentamicin-resistant cells) of both *Listeria* strains, but in the case of infection by p60 mutant, the increased amount of ammonium chloride showed only a minimal effect on the number of isolated bacteria. In both cell lines treated with chlorquinoline we observed a decrease in the number of viable intracellular bacteria isolated from infected monolayers. Our observation of parental and mutated strains of *Listeria* showed that phospholipase activity also depends on the presence of p60 protein. Mutated strain showed 31.46% reduction of PI-PLC activity measured in normal growth conditions. Protein p60 plays a role not only in *listeriolysin* O mediated haemolytic activity but full phospholipase C activity is also dependent on the presence of the *Iap* protein.

L21 ANSWER 28 OF 71 BIOSIS COPYRIGHT 2001 BIOSIS

AN 1999:100260 BIOSIS

DN PREV199900100260

TI Quantitative PCR for *Listeria monocytogenes* with colorimetric detection.

AU Wang, Chinling (1); Hong, Chao

CS (1) Coll. Vet. Med., Miss. State Univ., Box 9825, Mississippi State, MS 39762-9825 USA

SO Journal of Food Protection, (Jan., 1999) Vol. 62, No. 1, pp. 35-39.
ISSN: 0362-028X.
DT Article
LA English
AB An enzyme-linked immunosorbent assay (ELISA)-mediated polymerase chain reaction (PCR) technique was developed to detect and quantify *Listeria monocytogenes* in food products. The bacterial DNA was extracted from artificially contaminated food and co-amplified with a synthetic internal standard (IS) using primers specific for the target gene coding for the invasive-associated protein (*iap*), a virulence factor of *L. monocytogenes* (*iap*) or IS in the presence of fluorescein-dUTP PCR products were hybridized with biotinylated probes designed for the *iap* or IS, and then the hybrids were bound to a streptavidin-coated ELISA plate. An alkaline phosphatase-conjugated **antibody** to fluorescein was added to the plate and in the presence of substrate, PCR products were quantitated based on an optical density reading. The detection limit for *L. monocytogenes* experimentally inoculated into milk samples and channel catfish fillets was 20 CFU/ml and 1-2 CFU/g, respectively. Little or no cross reaction was detected in the presence of other spoilage and pathogenic organisms such as *Pseudomonas aeruginosa*, *Aeromonas hydrophila*, *Escherichia coli*, and *Staphylococcus aureus*. The ELISA-mediated PCR technique, when compared to traditional methods, is more rapid (2 working days) for detecting and quantifying *L. monocytogenes*.

L21 ANSWER 29 OF 71 USPATFULL
AN 1998:65198 USPATFULL
TI Destruction of the epithelium of an exocrine gland in the prophylactic and therapeutic treatment of cancer
IN Sukumar, Saraswati Vaidyanathan, Columbia, MD, United States
PA John Hopkins University School of Medicine, Baltimore, MD, United States (U.S. corporation)
PI US 5763415 19980609
AI US 1996-692001 19960802 (8)
PRAI US 1995-28929 19950803 (60)
DT Utility
EXNAM Primary Examiner: Low, Christopher S. F.; Assistant Examiner: Nguyen, Dave T.
LREP Leydig, Voit & Mayer, Ltd.
CLMN Number of Claims: 1
ECL Exemplary Claim: 1
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 662
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides prophylactic and therapeutic methods of treating the ductal epithelium of an exocrine gland, in particular a mammary gland, for disease, in particular cancer. The methods comprise contacting the ductal epithelium of the exocrine gland with an epithelium-destroying agent, preferably by ductal cannulation, so as to realize a prophylactic or therapeutic effect.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L21 ANSWER 30 OF 71 USPATFULL
AN 1998:44877 USPATFULL
TI Sequence-directed DNA-binding molecules compositions and methods

Searched by David Schreiber 308-4292

IN Edwards, Cynthia A., Menlo Park, CA, United States
 Fry, Kirk E., Palo Alto, CA, United States
 Cantor, Charles R., Boston, MA, United States
 Andrews, Beth M., Maynard, MA, United States
 PA Genelabs Technologies, Inc., Redwood City, CA, United States (U.S. corporation)
 PI US 5744131 19980428
 AI US 1995-476876 19950607 (8)
 RLI Division of Ser. No. US 1992-996783, filed on 23 Dec 1992 which is a continuation-in-part of Ser. No. US 1991-723618, filed on 27 Jun 1991, now abandoned
 DT Utility
 EXNAM Primary Examiner: Zitomer, Stephanie W.; Assistant Examiner: Atzel, Amy
 LREP Fabian, Gary R.; Stratford, Carol A.; Dehlinger, Peter J.
 CLMN Number of Claims: 3
 ECL Exemplary Claim: 1
 DRWN 48 Drawing Figure(s); 33 Drawing Page(s)
 LN.CNT 5113

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention defines an assay useful for screening libraries of synthetic or biological compounds for their ability to bind specific DNA test sequences. The assay is also useful for determining the sequence specificity and relative DNA-binding affinity of DNA-binding molecules for any particular DNA sequence. Also described herein are potential applications of the assay, including: 1) the detection of lead compounds or new drugs via the mass screening of libraries of synthetic or biological compounds (i.e., fermentation broths); 2) the design of sequence-specific DNA-binding drugs comprised of homo- or hetero-meric subunits of molecules for which the sequence specificity was determined using the assay; and 3) the use of molecules for which sequence specificity was determined using the assay as covalently attached moieties to aid in the binding of nucleic acid or other macromolecular polymers to nucleic acid sequences,

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L21 ANSWER 31 OF 71 USPATFULL
 AN 1998:39383 USPATFULL
 TI Sequence-directed DNA-binding molecules compositions and methods
 IN Edwards, Cynthia A., Menlo Park, CA, United States
 Fry, Kirk E., Palo Alto, CA, United States
 Cantor, Charles R., Boston, MA, United States
 Andrews, Beth M., Maynard, MA, United States
 PA Genelabs Technologies, Inc., Redwood City, CA, United States (U.S. corporation)
 PI US 5738990 19980414
 AI US 1995-475221 19950607 (8)
 RLI Division of Ser. No. US 1992-996783, filed on 23 Dec 1992 which is a continuation-in-part of Ser. No. US 1991-723618, filed on 27 Jun 1991, now abandoned
 DT Utility
 EXNAM Primary Examiner: Guzo, David; Assistant Examiner: Brusca, John S.
 LREP Fabian, Gary R.; Stratford, Carol A.; Dehlinger, Peter J.
 CLMN Number of Claims: 5
 ECL Exemplary Claim: 1
 DRWN 48 Drawing Figure(s); 33 Drawing Page(s)

LN.CNT 5040

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention defines an assay useful for screening libraries of synthetic or biological compounds for their ability to bind specific DNA test sequences. The assay is also useful for determining the sequence specificity and relative DNA-binding affinity of DNA-binding molecules for any particular DNA sequence. Also described herein are potential applications of the assay, including: 1) the detection of lead compounds or new drugs via the mass screening of libraries of synthetic or biological compounds (i.e., fermentation broths); 2) the design of sequence-specific DNA-binding drugs comprised of homo- or hetero-meric subunits of molecules for which the sequence specificity was determined using the assay; and 3) the use of molecules for which sequence specificity was determined using the assay as covalently attached moieties to aid in the binding of nucleic acid or other macromolecular polymers to nucleic acid sequences.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L21 ANSWER 32 OF 71 USPATFULL

AN 1998:25075 USPATFULL

TI Screening assay for the detection of DNA-binding molecules

IN Edwards, Cynthia A., Menlo Park, CA, United States

Cantor, Charles R., Boston, MA, United States

Andrews, Beth M., Watertown, MA, United States

Turin, Lisa M., Berkeley, CA, United States

PA Genelabs Technologies, Inc., Redwood City, CA, United States (U.S. corporation)

PI US 5726014 19980310

AI US 1993-123936 19930917 (8)

RLI Continuation-in-part of Ser. No. US 1992-996783, filed on 23 Dec 1992 which is a continuation-in-part of Ser. No. US 1991-723618, filed on 27 Jun 1991, now abandoned

DT Utility

EXNAM Primary Examiner: Jones, W. Gary; Assistant Examiner: Atzel, Amy

LREP Fabian, Gary R.; Stratford, Carol A.; Dehlinger, Peter J.

CLMN Number of Claims: 19

ECL Exemplary Claim: 1

DRWN 72 Drawing Figure(s); 47 Drawing Page(s)

LN.CNT 5659

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention defines a DNA:protein-binding assay useful for screening libraries of synthetic or biological compounds for their ability to bind DNA test sequences. The assay is versatile in that any number of test sequences can be tested by placing the test sequence adjacent to a defined protein binding screening sequence. Binding of molecules to these test sequence changes the binding characteristics of the protein molecule to its cognate binding sequence. When such a molecule binds the test sequence the equilibrium of the DNA:protein complexes is disturbed, generating changes in the concentration of free DNA probe. Numerous exemplary target test sequences (SEQ ID NO:1 to SEQ ID NO:600) are set forth. The assay of the present invention is also useful to characterize the preferred binding sequences of any selected DNA-binding molecule.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L21 ANSWER 33 OF 71 USPATFULL
 AN 1998:14634 USPATFULL
 TI Method of constructing sequence-specific DNA-binding molecules
 IN Edwards, Cynthia A., Menlo Park, CA, United States
 Fry, Kirk E., Palo Alto, CA, United States
 Cantor, Charles R., Boston, MA, United States
 Andrews, Beth M., Watertown, MA, United States
 PA Genelabs Technologies, Inc., Redwood City, CA, United States (U.S.
 corporation)
 PI US 5716780 19980210
 AI US 1995-484499 19950607 (8)
 RLI Division of Ser. No. US 1992-996783, filed on 23 Dec 1992 which is a
 continuation-in-part of Ser. No. US 1991-723618, filed on 27 Jun 1991,
 now abandoned
 DT Utility
 EXNAM Primary Examiner: Jones, W. Gary; Assistant Examiner: Atzel, Amy
 LREP Fabian, Gary R.; Stratford, Carol A.; Dehlinger, Peter J.
 CLMN Number of Claims: 9
 ECL Exemplary Claim: 1
 DRWN 48 Drawing Figure(s); 33 Drawing Page(s)
 LN.CNT 4929

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention defines an assay useful for screening libraries of
 synthetic or biological compounds for their ability to bind specific DNA
 test sequences. The assay is also useful for determining the sequence
 specificity and relative DNA-binding affinity of DNA-binding molecules
 for any particular DNA sequence. Also described herein are potential
 applications of the assay, including: 1) the detection of lead compounds
 or new drugs via the mass screening of libraries of synthetic or
 biological compounds (i.e., fermentation broths); 2) the design of
 sequence-specific DNA-binding drugs comprised of homo- or hetero-meric
 subunits of molecules for which the sequence specificity was determined
 using the assay; and 3) the use of molecules for which sequence
 specificity was determined using the assay as covalently attached
 moieties to aid in the binding of nucleic acid or other macromolecular
 polymers to nucleic acid sequences.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L21 ANSWER 34 OF 71 MEDLINE
 AN 1998439214 MEDLINE
 DN 98439214
 TI Identification of *Listeria monocytogenes* from unpasteurized
 apple juice using rapid test kits.
 AU Sado P N; Jinneman K C; Husby G J; Sorg S M; Omiecinski C J
 CS U. S. Food and Drug Administration, Bothell, Washington 98041, USA..
 psado@ora.fda.gov
 SO J Food Prot, (1998 Sep) 61 (9) 1199-202.
 Journal code: C48. ISSN: 0362-028X.
 CY United States
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 199902
 EW 19990204

AB A microbiological survey of 50 retail juices was conducted in the fall of 1996. These juices were analyzed for *Listeria monocytogenes*, *Escherichia coli* O157:H7, *Salmonella*, coliforms, fecal coliforms, and pH. Two unpasteurized juices were positive for *L. monocytogenes*: an apple juice and an apple raspberry blend with a pH of 3.78 and 3.75, respectively. Three *L. monocytogenes* isolates were characterized. The colonies were typical for *Listeria* sp. on Oxford and lithium chloride-phenylethanol-moxalactam agars and were beta-hemolytic on sheep blood agar. The isolates required 5 days of incubation at 35 degrees C to produce a positive rhamnose reaction in a phenol red carbohydrate broth. This slow rhamnose utilization resulted in these isolates not being identified using the Micro-ID test strip (Organon Technika). However, the isolates were positive for *L. monocytogenes* using the API *Listeria* strip (BioMerieux) and a multiplex polymerase chain reaction for detection of the hemolysis (*hly*) and invasion-associated protein (*iap*) genes.

L21 ANSWER 35 OF 71 MEDLINE DUPLICATE 2
 AN 1998156131 MEDLINE
 DN 98156131
 TI In situ detection of a virulence factor mRNA and 16S rRNA in *Listeria monocytogenes*.
 AU Wagner M; Schmid M; Juretschko S; Trebesius K H; Bubert A; Goebel W; Schleifer K H
 CS Lehrstuhl für Mikrobiologie, Technische Universität München, Germany..
 SO FEMS MICROBIOLOGY LETTERS, (1998 Mar 1) 160 (1) 159-68.
 CY Netherlands
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 199805
 EW 19980504
 AB Simultaneous in situ analysis of the structure and function of bacterial cells present within complex communities is a key for improving our understanding of microbial ecology. A protocol for the in situ identification of *Listeria* spp. using fluorescently tagged, rRNA-targeted oligonucleotide probes was developed. Ethanol fixation and enzymatic pretreatment with lysozyme and proteinase K were used to optimize whole cell hybridization of exponential phase and stationary phase *Listeria* spp. cells. In parallel, transcript probes carrying multiple digoxigenin molecules were combined with anti-digoxigenin Fab antibody fragments labeled with horseradish peroxidase to detect, via the catalytic deposition of fluorescein-tyramide, the *iap*-mRNA in single *Listeria monocytogenes* cells. The *iap* gene encodes the associated virulence factor p60. Application of the new signal amplification technique resulted in strong signals comparable in intensity to those obtained with fluorescently labeled rRNA-targeted oligonucleotide probes.

L21 ANSWER 36 OF 71 BIOSIS COPYRIGHT 2001 BIOSIS
 AN 1998:415873 BIOSIS
 DN PREV199800415873
 TI Comparison of virulence factors between hemolytic and non-hemolytic *Listeria monocytogenes*.

AU Zhang, J.; Wang, C.
 CS Coll. Vet. Med., Miss. State Univ., Starkville, MS USA
 SO **Abstracts of the General Meeting of the American Society for Microbiology**, (1998) Vol. 98, pp. 106.
 Meeting Info.: **98th General Meeting of the American Society for Microbiology** Atlanta, Georgia, USA May 17-21, 1998 American Society for Microbiology
 . ISSN: 1060-2011.
 DT **Conference**
 LA English

L21 ANSWER 37 OF 71 MEDLINE
 AN 1998159369 MEDLINE
 DN 98159369
 TI Classification of *Listeria monocytogenes* by PCR-restriction enzyme analysis in the two genes of hlyA and iap.
 AU Saito A; Sawada T; Ueda F; Hondo R
 CS Food Microbiology Section, Saitama Institute of Public Health, Japan.
 SO NEW MICROBIOLOGICA, (1998 Jan) 21 (1) 87-92.
 Journal code: CGC. ISSN: 1121-7138.
 CY Italy
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 199805
 EW 19980503
 AB PCR-restriction enzyme analysis in the two virulence-associated genes was performed. The hlyA gene coding for **listeriolysin O** and the **iap** gene coding for an invasion associated factor were amplified with primers SH2 or SI3. The PCR products obtained were cleaved with 32 restriction enzymes, and restriction profiles from 12 strains, 6 each of serotypes 1/2a and 4b, were compared. We obtained two profiles for the hlyA using 4 restriction enzymes and eight profiles for the **iap** by using AluI, and the results of the profiles did not correlate with the serotypes. The polymorphism in the **iap** region was of a higher degree than that in the hlyA region, and the PCR-restriction enzyme analysis of the **iap** gene with primers SI3 and AluI was confirmed as one of the useful epidemiological analysis methods for listeriosis outbreaks.

L21 ANSWER 38 OF 71 USPATFULL
 AN 97:112300 USPATFULL
 TI Method of ordering sequence binding preferences of a DNA-binding molecule
 IN Edwards, Cynthia A., Menlo Park, CA, United States
 Fry, Kirk E., Palo Alto, CA, United States
 Cantor, Charles R., Boston, MA, United States
 Andrews, Beth M., Maynard, MA, United States4)
 PA Genelabs Technologies, Inc., Redwood City, CA, United States (U.S. corporation)
 PI US 5693463 19971202
 AI US 1992-996783 19921223 (7)
 DCD 20110426
 RLI Continuation-in-part of Ser. No. US 1991-723618, filed on 27 Jun 1991, now abandoned
 DT Utility

EXNAM Primary Examiner: Zitomer, Stephanie W.; Assistant Examiner: Atzel, Amy
LREP Fabian, Gary R.; Stratford, Carol A.; Dehlinger, Peter J.
CLMN Number of Claims: 3
ECL Exemplary Claim: 1
DRWN 48 Drawing Figure(s); 33 Drawing Page(s)
LN.CNT 4908

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention defines an assay useful for screening libraries of synthetic or biological compounds for their ability to bind specific DNA test sequences. The assay is also useful for determining the sequence specificity and relative DNA-binding affinity of DNA-binding molecules for any particular DNA sequence. Also described herein are potential applications of the assay, including: 1) the detection of lead compounds or new drugs via the mass screening of libraries of synthetic or biological compounds (i.e., fermentation broths); 2) the design of sequence-specific DNA-binding drugs comprised of homo- or hetero-meric subunits of molecules for which the sequence specificity was determined using the assay; and 3) the use of molecules for which sequence specificity was determined using the assay as covalently attached moieties to aid in the binding of nucleic acid or other macromolecular polymers to nucleic acid sequences.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L21 ANSWER 39 OF 71 USPATFULL
AN 97:20385 USPATFULL
TI DNA probes specific for virulent **listeria** monocytogenes
IN Luchansky, John B., Madison, WI, United States
Chen, Jianchi, Tallahassee, FL, United States
PA Wisconsin Alumni Research Foundation, Madison, WI, United States (U.S. corporation)
PI US 5610012 19970311
AI US 1994-225473 19940408 (8)
DT Utility
EXNAM Primary Examiner: Jones, W. Gary; Assistant Examiner: Rees, Dianne
LREP Schwegman, Lundberg, Woessner & Kluth, P.A.
CLMN Number of Claims: 22
ECL Exemplary Claim: 1
DRWN 8 Drawing Figure(s); 6 Drawing Page(s)
LN.CNT 767

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB An assay for detecting virulent *L. monocytogenes* is provided. This assay includes the steps of: contacting the nucleic acids of *L. monocytogenes* with a probe under conditions permitting hybridization; and detecting any probe that hybridizes to the nucleic acids. The probe used in this method includes a DNA sequence selected from a group consisting of a 0.9 kb HindIII-EcoRI fragment of plasmid pLUCH52, or a part thereof; a 1.1 kb HindIII-EcoRI fragment of plasmid pLUCH51, or a part thereof; and a 1.8 kb HindIII-EcoRI fragment of plasmid pLUCH44, or a part thereof).

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L21 ANSWER 40 OF 71 MEDLINE
AN 1998027381 MEDLINE
DN 98027381
TI Sensitive detection of viable **Listeria** monocytogenes by reverse

Searched by David Schreiber 308-4292

transcription-PCR.

AU Klein P G; Juneja V K
 CS Microbial Food Safety Research Unit, Eastern Regional Research Center,
 U.S. Department of Agriculture, Wyndmoor, Pennsylvania 19038, USA.
 SO APPLIED AND ENVIRONMENTAL MICROBIOLOGY, (1997 Nov) 63 (11) 4441-8.
 Journal code: 6K6. ISSN: 0099-2240.
 CY United States
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 199802
 EW 19980204
 AB Detection of pathogens in contaminated food products by PCR can result in false-positive data due to the amplification of DNA from nonviable cells. A new method based on reverse transcription-PCR (RT-PCR) amplification of mRNA for the specific detection of viable *Listeria monocytogenes* was developed. The expression of three *L. monocytogenes* genes, *iap*, *hly*, and *prfA*, was examined to determine a suitable target for amplification of RT-PCR. Total RNA from *L. monocytogenes* was isolated, and following DNase treatment, the RNA was amplified by both RT-PCR and PCR with primers specific for the three genes. Amplicon detection was accomplished by Southern hybridization to digoxigenin-labeled gene probes. The levels of expression of these three genes differed markedly, and the results indicated that the *iap* gene would provide a good target for development of a specific method for detection of viable *L. monocytogenes* based on RT-PCR amplification. After a 1-h enrichment, the 371-bp *iap*-specific product was detected with a sensitivity of ca. 10 to 15 CFU/ml from pure culture. Detection of the 713-bp *hly*-specific amplicon was ca. 4,000 times less sensitive after 1 h, whereas detection of the 508-bp *prfA* product showed the lowest level of sensitivity, with detection not observed until after a 5-h enrichment period. The amplification of the *iap* mRNA was specific for *L. monocytogenes*. Overall, the assay could be completed in ca. 54 h. The use of RT-PCR amplification for the detection of viable *L. monocytogenes* was validated in artificially contaminated cooked ground beef. Following a 2-h enrichment incubation, the *iap*-specific amplification product could be detected in a cooked meat sample that was originally inoculated with ca. 3 CFU/g. These results support the usefulness of RT-PCR amplification of mRNA as a sensitive method for the specific detection of viable *L. monocytogenes* and indicate that this method may prove useful in the detection of this pathogen in ready-to-eat, refrigerated meat products.

L21 ANSWER 41 OF 71 MEDLINE
 AN 1998438963 MEDLINE
 DN 98438963
 TI A nested PCR method to detect *Listeria monocytogenes* in artificially contaminated blood specimens.
 AU Cocolin L; Manzano M; Cantoni C; Comi G
 CS Dipartimento di Scienze degli Alimenti, Facolt'a di Agraria, Universit'a di Udine, Italy.
 SO RESEARCH IN MICROBIOLOGY, (1997 Jul-Aug) 148 (6) 485-90.
 Journal code: R6F. ISSN: 0923-2508.
 CY France
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English

FS Priority Journals
 EM 199901
 EW 19990104
 AB A nested PCR-based test was developed for the detection of **Listeria** monocytogenes in blood specimens from patients with **listeriosis**. Two pairs of oligonucleotide primers were designed to amplify a 1395-bp and a 453-bp fragment of the **iap** gene of **L. monocytogenes**. Amplified products were analysed with gel electrophoresis and stained with ethidium bromide. The PCR method described could be routinely used to diagnose **listeriosis**.

L21 ANSWER 42 OF 71 MEDLINE
 AN 1998164119 MEDLINE
 DN 98164119
 TI Single-strand conformation polymorphism (SSCP) analysis of **Listeria** monocytogenes **iap** gene as tool to detect different serogroups.
 AU Manzano M; Coccolin L; Pipan C; Falasca E; Botta G A; Cantoni C; Comi G
 CS Dipartimento di Scienze degli Alimenti, Facolt`a di Agraria, Universit`a di Udine, Italy.
 SO MOLECULAR AND CELLULAR PROBES, (1997 Dec) 11 (6) 459-62.
 Journal code: NG9. ISSN: 0890-8508.
 CY ENGLAND: United Kingdom
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 199807
 EW 19980702
 AB PCR-single-strand conformation polymorphism (PCR-SSCP) analysis is a convenient technique for the detection of mutations. As the mobility of single-stranded DNA is sequence-dependent it could therefore be used to determine serotype-related sequence variations in **Listeria** monocytogenes. Sero-specific patterns were observed in different **L. monocytogenes** serogroups.

L21 ANSWER 43 OF 71 MEDLINE
 AN 1998164117 MEDLINE
 DN 98164117
 TI A PCR-microplate capture hybridization method to detect **Listeria** monocytogenes in blood.
 AU Coccolin L; Manzano M; Cantoni C; Comi G
 CS Dipartimento di Scienze degli Alimenti, Facolt`a di Agraria, Universit`a di Udine, Italy.
 SO MOLECULAR AND CELLULAR PROBES, (1997 Dec) 11 (6) 453-5.
 Journal code: NG9. ISSN: 0890-8508.
 CY ENGLAND: United Kingdom
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 199807
 EW 19980702
 AB In order to improve the diagnosis of **Listeria** monocytogenes infection, we have developed a polymerase chain reaction (PCR)-based assay combined with microplate capture hybridization technique. The system is based on selective amplification of **L. monocytogenes** with two specific primers based on the **iap** gene. The amplicon produced, with

digoxigenin 11-dUTP incorporated during PCR, is hybridized in streptavidin-coated microtitre plates prepared with biotinylated specific DNA probe. The method involved requires approximately 6-8 h, and its high sensitivity, rapidity and simplicity should make it valuable for diagnosis and for epidemiological studies of **listeriosis**.

L21 ANSWER 44 OF 71 MEDLINE
 AN 97259839 MEDLINE
 DN 97259839
 TI Sample preparation and DNA extraction procedures for polymerase chain reaction identification of **Listeria** monocytogenes in seafoods.
 AU Agersborg A; Dahl R; Martinez I
 CS Norwegian Institute of Fisheries and Aquaculture N-9005 Tromso, Norway.
 SO INTERNATIONAL JOURNAL OF FOOD MICROBIOLOGY, (1997 Apr 15) 35 (3) 275-80.
 Journal code: AVJ. ISSN: 0168-1605.
 CY Netherlands
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 199709
 EW 19970902
 AB Five grams of seafood products were inoculated with one to 500 viable or 10(9) heat-killed cells of **Listeria** monocytogenes. The presence of the pathogen was detected by the polymerase chain reaction (PCR) with primers specific for fragments of the **listeriolysin** O (hly) gene (two sets) and for the invasion-associated protein (**iap**) gene (one set). For DNA preparation, boiling, either alone or in combination with lysozyme and proteinase K treatment, was not always sufficient to lyse *L. monocytogenes*, while treatment with Triton X-100 produced consistently good DNA suitable for amplification. To avoid false-negative and false-positive results, 48 h incubations were necessary and a subculturing step after an initial 24 h incubation greatly improved the results. The primers that amplified regions of the **listeriolysin** O gene gave clearer and stronger products than primers for the invasion-associated protein gene. Using this method we were able to detect one to five *L. monocytogenes* cells in 5 g of product in a total of 55 h.

L21 ANSWER 45 OF 71 MEDLINE DUPLICATE 3
 AN 97123656 MEDLINE
 DN 97123656
 TI Isolation of catalase-negative **Listeria** monocytogenes strains from **listeriosis** patients and their rapid identification by anti-p60 antibodies and/or PCR.
 AU Bubert A; Riebe J; Schnitzler N; Schonberg A; Goebel W; Schubert P
 CS Lehrstuhl fur Mikrobiologie, Theodor-Boveri-Institut fur Biowissenschaften, Universitat Wurzburg, Germany.. bubert@biozentrum.uni-wuerzburg.de
 SO JOURNAL OF CLINICAL MICROBIOLOGY, (1997 Jan) 35 (1) 179-83.
 Journal code: HSH. ISSN: 0095-1137.
 CY United States
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 199705
 EW 19970504
 AB Two catalase-negative **Listeria** monocytogenes serovar 1/2b

strains were isolated from *listeriosis* patients in 1995 in Germany. The infections appeared in individuals from different cities at different seasons and were caused by *L. monocytogenes* strains of different clonal types. In particular, the catalase reaction of one strain isolated from blood was consistently negative, whereas this reaction was only reversibly blocked when the strain was freshly isolated from ascitic fluid. After subculturing, the catalase-positive reaction was restored. Initially, identification of these isolates was difficult to achieve not only because of the lack of a catalase reaction, which generally distinguishes *L. monocytogenes* from other morphologically similar pathogenic gram-positive bacteria, but also because other routinely used biochemical tests such as CAMP and the commercial API test gave unclear results. However, rapid and unequivocal identification of these strains was possible by analyzing secretions of the p60 protein in culture supernatants by enzyme-linked immunosorbent assay or Western blot (immunoblot) analysis with our recently developed *Listeria*- and *L. monocytogenes*-specific anti-p60 antibodies. Additionally, the identifications were confirmed by *Listeria*- and *L. monocytogenes*-specific PCR analyses with primers derived from the *iap*, *hly*, and *prfA* genes. Immunoanalyses also allowed for the differentiation of these two strains, whereas no differentiation was possible by PCR when the internal, variable repetitive *iap* gene portion was analyzed. However, size variations of the PCR products comprising these gene portions which were obtained from a number of *L. monocytogenes* strains belonging to the same serotypes indicated that this type of PCR is not only useful for specific identifications but may be used in parallel as an additional marker for epidemiological studies. In conclusion, the data suggest that catalase production should not be taken as a strict criterion for the identification of *listeriae*. Furthermore, at least the infection caused by the stably catalase-negative strain supports the notion that catalase does not seem to be necessary for the intracellular growth of *L. monocytogenes*.

L21 ANSWER 46 OF 71 MEDLINE
 AN 97366783 MEDLINE
 DN 97366783
 TI A RE-PCR method to distinguish *Listeria monocytogenes* serovars.
 AU Comi G; Cocolin L; Cantoni C; Manzano M
 CS Dipartimento di Scienze degli Alimenti, Universit`a degli Studi di Udine, Italy. Food Sci@DSA. Uniud.It.
 SO FEMS IMMUNOLOGY AND MEDICAL MICROBIOLOGY, (1997 Jun) 18 (2) 99-104.
 Journal code: BP1. ISSN: 0928-8244.
 CY Netherlands
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 199711
 EW 19971104
 AB Strains (107) of *L. monocytogenes* were tested with a PCR-restriction enzyme analysis with two new original primers. A segment of 1395 bp containing the entire *iap* gene in *L. monocytogenes* was amplified by the PCR technique. The PCR product was cleaved with the restriction enzymes HindIII and RsaI, and the fragments generated were separated by gel electrophoresis. Two groups of serovars were obtained: one group contained serovars 1/2a and 1/2c, the other group contained serovars 1/2b, 3b and 4b. The PCR-restriction enzyme analysis method described in this

paper could be a useful tool for the unambiguous division of *L. monocytogenes* into two serovar groups, and it could be used to study the evolution of different serotypes and groups of serotypes in foods produced in the same processing plant and processed during the same month. The RE-PCR method used can give a rapid confirm at the subgroup level in the laboratory of an epidemiological association between human disease and suspected sources of contaminated food.

L21 ANSWER 47 OF 71 MEDLINE
 AN 97306423 MEDLINE
 DN 97306423
 TI Detection and identification of *Listeria monocytogenes* from milk and cheese by a single-step PCR.
 AU Manzano M; Coccolin L; Cantoni C; Comi G
 CS Department of Food Science, University of Udine, Italy.
 SO MOLECULAR BIOTECHNOLOGY, (1997 Feb) 7 (1) 85-8.
 Journal code: B97. ISSN: 1073-6085.
 CY United States
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 199709
 EW 19970904
 AB Primers of *iap* gene were used as a target to develop a PCR technique for detecting *Listeria monocytogenes* in milk and cheese. The PCR technique gives good results in the detection of *Listeria monocytogenes* either in artificially or naturally contaminated foodstuffs and has a high sensitivity and specificity. Application of this rapid diagnostic tool could provide further information about the spread of *L. monocytogenes* in milk and cheese.

L21 ANSWER 48 OF 71 MEDLINE
 AN 97459304 MEDLINE
 DN 97459304
 TI Some macrophages kill *Listeria monocytogenes* while others do not.
 AU Fleming S D; Campbell P A
 CS Department of Medicine, National Jewish Medical and Research Center, Denver, Colorado, USA.
 NC AI 11240 (NIAID)
 SO IMMUNOLOGICAL REVIEWS, (1997 Aug) 158 69-77. Ref: 64
 Journal code: GG4. ISSN: 0105-2896.
 CY Denmark
 DT Journal; Article; (JOURNAL ARTICLE)
 General Review; (REVIEW)
 (REVIEW, TUTORIAL)
 LA English
 FS Priority Journals
 EM 199804
 EW 19980401
 AB It is not known why some macrophages can kill certain microbes, such as the facultative intracellular bacterium *Listeria monocytogenes* (*L. monocytogenes*), while other macrophages cannot. Perhaps *listericidal* activity is a property of macrophages at specific stages of differentiation; may be the ability to kill this bacterium is regulated by the microenvironment of the cell: or it is possible that

other regulatory forces are important. We describe here three characteristics that distinguish macrophages which can kill *L. monocytogenes* from those which cannot. First, **listericidal** macrophages must have neither too much nor too little intracellular iron—they must have an intermediate amount. Second, the receptor a macrophage uses to phagocytose *L. monocytogenes* seems to influence the intracellular fate of this bacterium. And third, macrophages which have cell-surface interleukin-10 (IL-10), a known downregulator of macrophage function, cannot kill *L. monocytogenes*. These traits of macrophages and their effects on **listericidal** activity are reviewed here, and the possibility that these properties might interact to control macrophage bactericidal activity is discussed.

L21 ANSWER 49 OF 71 MEDLINE

AN 1998000886 MEDLINE

DN 98000886

TI The **Listeria** monocytogenes **iap** gene as an indicator gene for the study of PrfA-dependent regulation.

AU Bubert A; Kestler H; Gotz M; Bockmann R; Goebel W

CS Theodor-Boveri-Institut für Biowissenschaften, Lehrstuhl für Mikrobiologie, Universität Würzburg, Germany.

SO MOLECULAR AND GENERAL GENETICS, (1997 Sep) 256 (1) 54-62.

Journal code: NGP. ISSN: 0026-8925.

CY GERMANY: Germany, Federal Republic of

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 199801

EW 19980104

AB The **iap** gene of **Listeria** monocytogenes encodes the extracellular protein p60, which possesses a murein hydrolase activity necessary for septum separation. We constructed *L. monocytogenes* EGD strains harbouring plasmids that carry the **iap** gene under the control of the PrfA-regulated promoters of the *L. monocytogenes* genes *hly*, *mpl*, and *actA*. After insertional inactivation of the chromosomal **iap** gene in *L. monocytogenes* EGD, p60 synthesis was strictly dependent on PrfA. Elevated temperature (40 degrees C) enhanced synthesis of p60 in *L. monocytogenes* when the **iap** gene was under the control of the *hly* promoter; this appeared to be associated with increased synthesis of PrfA at this temperature. Synthesis of p60 in *L. monocytogenes* was significantly lower when the **iap** gene was placed under the control of the *actA* or the *mpl* promoter. Transcription of the **iap** gene was repressed in *L. monocytogenes* in the presence of PrfA when **iap** expression was under the control of the *prfA* promoter P2. Under the control of the *hly* promoter the gene produced low levels of secreted p60 in the presence of low amounts of PrfA, and this in turn led to the generation of long **listerial** cell filaments consisting of bacteria that had failed to separate. Overexpression of p60 in the presence of high levels of PrfA caused formation of single cells, which showed reduced viability depending on the level of secreted p60. These data suggest that the **iap** gene may be a valuable tool for monitoring virulence gene regulation by PrfA under in vivo conditions, without disturbing the integrity of the infected host cells.

L21 ANSWER 50 OF 71 USPATFULL

AN 96:108816 USPATFULL

TI Sequence-directed DNA-binding molecules compositions and methods
 IN Edwards, Cynthia A., Menlo Park, CA, United States
 Cantor, Charles R., Boston, MA, United States
 Andrews, Beth M., Maynard, MA, United States
 Turin, Lisa M., Redwood City, CA, United States
 Fry, Kirk E., Palo Alto, CA, United States
 PA Genelabs Technologies, Inc., Redwood City, CA, United States (U.S.
 corporation)
 PI US 5578444 19961126
 AI US 1993-171389 19931220 (8)
 RLI Continuation-in-part of Ser. No. US 1993-123936, filed on 17 Sep 1993
 which is a continuation-in-part of Ser. No. US 1992-996783, filed on 23
 Dec 1992 which is a continuation-in-part of Ser. No. US 1991-723618,
 filed on 27 Jun 1991, now abandoned
 DT Utility
 EXNAM Primary Examiner: Zitomer, Stephanie W.; Assistant Examiner: Atzel, Amy
 LREP Fabian, Gary R.; Brookes, Allen A.; Stratford, Carol A.
 CLMN Number of Claims: 15
 ECL Exemplary Claim: 1
 DRWN 71 Drawing Figure(s); 48 Drawing Page(s)
 LN.CNT 5845

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention defines a DNA:protein-binding assay useful for
 screening libraries of synthetic or biological compounds for their
 ability to bind DNA test sequences. The assay is versatile in that any
 number of test sequences can be tested by placing the test sequence
 adjacent to a defined protein binding screening sequence. Binding of
 molecules to these test sequence changes the binding characteristics of
 the protein molecule to its cognate binding sequence. When such a
 molecule binds the test sequence the equilibrium of the DNA:protein
 complexes is disturbed, generating changes in the concentration of free
 DNA probe. Numerous exemplary target test sequences (SEQ ID NO:1 to SEQ
 ID NO:600) are set forth. The assay of the present invention is also
 useful to characterize the preferred binding sequences of any selected
 DNA-binding molecule.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L21 ANSWER 51 OF 71 USPATFULL
 AN 96:85038 USPATFULL
 TI Peptides representing epitopic sites for bacterial and viral meningitis
 causing agents and their CNS carrier and uses thereof
 IN Alstyne, Diane V., Vancouver, Canada
 Sharma, Lawrence R., Vancouver, Canada
 PA Insight Biotek, Inc., St. Michaels, Barbados (non-U.S. corporation)
 PI US 5556757 19960917
 AI US 1995-482847 19950607 (8)
 RLI Division of Ser. No. US 1993-127499, filed on 28 Sep 1993
 DT Utility
 EXNAM Primary Examiner: Parr, Margaret; Assistant Examiner: Loring, Susan A.
 LREP Foley & Lardner
 CLMN Number of Claims: 2
 ECL Exemplary Claim: 1
 DRWN 13 Drawing Figure(s); 9 Drawing Page(s)
 LN.CNT 2692

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Peptides comprising a Meningitis Related Homologous Antigenic Sequence (MRHAS) are provided. The MRHAS is found in meningitis-causing organisms and chemokines involved in cell chemotaxis. The peptides are useful as antigens and vaccines for detection, diagnosis and treatment of meningitis.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L21 ANSWER 52 OF 71 USPATFULL
AN 96:34042 USPATFULL
TI **Antibodies** which bind meningitis related homologous antigenic sequences
IN Van Alstyne, Diane, Vancouver, Canada
Sharma, Lawrence R., Vancouver, Canada
PA Insight Biotech Inc., St. Michael, Barbados (non-U.S. corporation)
PI US 5510264 19960423
AI US 1993-127499 19930928 (8)
DT Utility
EXNAM Primary Examiner: Parr, Margaret; Assistant Examiner: Loring, Susan A.
LREP Foley & Lardner
CLMN Number of Claims: 24
ECL Exemplary Claim: 1
DRWN 13 Drawing Figure(s); 9 Drawing Page(s)
LN.CNT 2721

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Monoclonal **antibodies** capable of binding to a Meningitis Related Homologous Antigenic Sequence (MRHAS) are provided. The MRHAS is found in meningitis-causing organisms and chemokines involved in cell chemotaxis. The monoclonal **antibodies** are useful for detection and diagnosis of meningitis.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L21 ANSWER 53 OF 71 MEDLINE
AN 96332670 MEDLINE
DN 96332670
TI Tetrapac (tpc), a novel genotype of Neisseria gonorrhoeae affecting epithelial cell invasion, natural transformation competence and cell separation.
AU Fussenegger M; Kahrs A F; Facius D; Meyer T F
CS Max-Planck-Institut fur Biologie, Abteilung Infektionsbiologie, Tübingen, Germany.
SO MOLECULAR MICROBIOLOGY, (1996 Mar) 19 (6) 1357-72.
Journal code: MOM. ISSN: 0950-382X.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
OS GENBANK-Z68205
EM 199611
AB We characterized a novel mutant phenotype (tetrapac, tpc) of Neisseria gonorrhoeae (Ngo) associated with a distinctive rough-colony morphology and bacterial growth in clusters of four. This phenotype, suggesting a defect in cell division, was isolated from a mutant library of Ngo MS11 generated with the phoA minitransposon TnMax4. The tpc mutant shows a 30% reduction in the overall murein hydrolase activity using Escherichia coli

murein as substrate. Tetrapacs can be resolved by co-cultivation with wild-type Ngo, indicating that Tpc is a diffusible protein. Interestingly, Tpc is absolutely required for the natural transformation competence of piliated Ngo. Mutants in *tpc* grow normally, but show a approximately 10-fold reduction in their ability to invade human epithelial cells. The *tpc* sequence reveals an open reading frame of approximately 1 kb encoding a protein (Tpc) of 37 kDa. The primary gene product exhibits an N-terminal leader sequence typical of lipoproteins, but palmitoylation of Tpc could not be demonstrated. The ribosomal binding site of *tpc* is immediately downstream of the translational stop codon of the *folC* gene coding for an enzyme involved in folic acid biosynthesis and one-carbon metabolism. The *tpc* gene is probably co-transcribed from the *folC* promoter and a promoter located within the *folC* gene. The latter promoter sequence shares significant homology with *E. coli* gearbox consensus promoters. All three mutant phenotypes, i.e. the cell separation defect, the transformation deficiency and the defect in cell invasion can be restored by complementation of the mutant with an intact *tpc* gene. To some extent the *tpc* phenotype is reminiscent of *iap* in *Listeria*, *lytA* in *Streptococcus pneumoniae* and *lyt* in *Bacillus subtilis*, all of which are considered to represent murein hydrolase defects.

L21 ANSWER 54 OF 71 MEDLINE
 AN 97034664 MEDLINE
 DN 97034664
 TI Incidence of *Listeria* spp. in tropical fish.
 AU Jeyasekaran G; Karunasagar I; Karunasagar I
 CS Department of Fishery Microbiology, University of Agricultural Sciences, College of Fisheries, Mangalore, India.
 SO INTERNATIONAL JOURNAL OF FOOD MICROBIOLOGY, (1996 Aug) 31 (1-3) 333-40.
 Journal code: AVJ. ISSN: 0168-1605.
 CY Netherlands
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 199702
 EW 19970204
 AB The incidence of *Listeria* spp. in tropical fish and shellfish was studied. The isolation protocol included a pre-enrichment, followed by two selective enrichment steps and plating on three selective agars. *Listeria* monocytogenes could be detected in 17.2% of finfish and 12.1% of shellfish. *L. innocua* was the most common species encountered. In 6.9% finfish and 5.6% shellfish, both *L. monocytogenes* and *L. innocua* were detected. Polymerase chain reaction (PCR)-based amplification of internal fragments of the *iap* gene was found to be useful in differentiation of *L. monocytogenes* from *L. innocua*.

L21 ANSWER 55 OF 71 BIOSIS COPYRIGHT 2001 BIOSIS
 AN 1996:422622 BIOSIS
 DN PREV199699153678
 TI Protein p60 participates in intestinal host invasion by *Listeria* monocytogenes.
 AU Hess, Juergen (1); Gentschev, Anja Vv Drehero; Goebel, Werner; Ladel, Christoph; Miko, Diana; Kaufmann, Stefan H. E.
 CS (1) Abt. Immunol., Univ. Ulm, Albert-Einstein-Allee 11, D-89070 Ulm Germany
 SO Zentralblatt fuer Bakteriologie, (1996) Vol. 284, No. 2-3, pp. 263-272.

ISSN: 0934-8840.

DT Article

LA English

AB The role of p60 in intestinal invasion by *Listeria monocytogenes* was assessed after oral infection of mice with the p60 low-expressing mutant RIII, or with anti-p60 **antibody** coated wild-type EGD. Invasion by *L. monocytogenes* RIII bacteria has been unimpaired suggesting that a low density of p60 suffices for entry. Up to 24 h post infection (p. i.), intestinal penetration by *L. monocytogenes* EGD bacteria was markedly reduced by coating with anti-p60 **antibodies**. In histological sections, anti-p60 **antibody**-treated *L. monocytogenes* EGD, but not uncoated **listeriae** were still detectable 24 h p. i. at the apical surface of enterocytes in the intestine. We conclude that p60 contributes to host invasion through the natural port of **listerial** entry, the intestinal epithelium.

L21 ANSWER 56 OF 71 HCAPLUS COPYRIGHT 2001 ACS

AN 1995:742676 HCAPLUS

DN 123:141716

TI Meningitis related homologous antigenic sequences (MRHAS) of bacterial and viral origins and their use for diagnosis and treatment of meningitis

IN Van Alstyne, Diane; Sharma, Lawrence Rajendra

PA Can.

SO PCT Int. Appl., 98 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9509232	A2	19950406	WO 1994-CA516	19940928
	WO 9509232	A3	19951012		
	W:	AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ, VN			
	RW:	KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
	US 5510264	A	19960423	US 1993-127499	19930928
	AU 9476504	A1	19950418	AU 1994-76504	19940928
	EP 677101	A1	19951018	EP 1994-926758	19940928
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE			
	US 5556757	A	19960917	US 1995-482847	19950607
PRAI	US 1993-127499		19930928		
	WO 1994-CA516		19940928		

AB The invention described herein relates to the application of techniques providing novel materials useful in the research, diagnosis, treatment and vaccination against meningitis and/or processes, or pathogenic mechanisms involving chemokines. More specifically, this invention provides novel peptides corresponding to homologous antigenic amino acid sequences on regions of bacterial and viral agents known to cause meningitis and on chemokines known to attract monocytes. It also provides analogs of those peptides and mixts. and combinations of those peptides and analogs. These techniques include the prodn. and application of novel monoclonal antibodies reactive with such antigenic regions, peptides, and mixts. and combinations thereof that are useful for detecting meningitis infection

and pathogenic processes involving chemokines. The techniques also include eliciting antibodies specific to meningitis causing agents. MRHAS of rubella virus, HIV-1, Haemophilus influenzae virus, Nisseria meningitidis, Streptococcus pneumoniae, and Listeria monocytogenes, are shown.

L21 ANSWER 57 OF 71 MEDLINE DUPLICATE 4
 AN 96118685 MEDLINE
 DN 96118685
 TI **Listeria** monocytogenes exists in at least three evolutionary lines: evidence from flagellin, invasive associated protein and **listeriolysin O** genes.
 AU Rasmussen O F; Skouboe P; Dons L; Rossen L; Olsen J E
 CS Biotechnological Institute, Lundtoftevej 100, Building Lyngby, Denmark.
 SO MICROBIOLOGY, (1995 Sep) 141 (Pt 9) 2053-61.
 Journal code: BXW. ISSN: 1350-0872.
 CY ENGLAND: United Kingdom
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 OS GENBANK-X85813; GENBANK-X85814; GENBANK-X85815; GENBANK-X85816;
 GENBANK-X85817; GENBANK-X85818; GENBANK-X85819; GENBANK-X85820;
 GENBANK-X85821; GENBANK-X85822; GENBANK-X85823; GENBANK-X85824;
 GENBANK-X85825; GENBANK-X85826; GENBANK-X85827; GENBANK-X85828;
 GENBANK-X85829; GENBANK-X85830; GENBANK-X85831; GENBANK-X85832;
 GENBANK-X85833; GENBANK-X85834; GENBANK-X85835; GENBANK-X85836;
 GENBANK-X85837; GENBANK-X85838; GENBANK-X85839; GENBANK-X85840;
 GENBANK-X85841; GENBANK-X85842
 EM 199603
 AB Regions of the genes encoding flagellin (flaA), the invasive associated protein (**iap**), **listeriolysin O** (hly) and 23S rRNA were sequenced for a range of **Listeria** monocytogenes isolates of different origin and serotypes. Several nucleotide sequence variations were found in the flaA, **iap** and hly genes. No differences were found for the rRNA genes, but our approach does not exclude the existence of differences between single copies of these genes. Based on the sequence differences, the L. monocytogenes strains can be divided into three distinct sequence types. Further, the presence of only a small number of sequence differences within each group indicates a strong degree of conservation within the groups. There was a complete correspondence among the groups of strains formed according to the analysis of the flaA, **iap** and hly genes, and the grouping correlates with serotype, pulsed field gel electrophoretic and multilocus enzyme electrophoretic data. Analysis of the region encoding the threonine-asparagine repeat units in the **iap** gene revealed some striking features. Sequence type 1 strains were found to have 16-17 repeats, sequence type 2 strains had 16-20 repeats whereas the two sequence type 3 strains analysed had only 11 repeats. Furthermore, within a 19 bp segment there was a 37% difference between the sequences of type 1 and 2 strains and that segment was absent in type 3 strains. Within the threonine-asparagine repeat region the nucleotide differences gave rise to four amino acid changes; however, all were changes among the three amino acids present in the repeat structure indicating a strong selective pressure on the composition of this region.

L21 ANSWER 58 OF 71 HCAPLUS COPYRIGHT 2001 ACS
 Searched by David Schreiber 308-4292

AN 1994:653319 HCAPLUS
DN 121:253319
TI Synthetic epitopes of *Listeria monocytogenes* p60 protein for preparation of antibodies
AU Bubert, Andreas; Schubert, Peter; Koehler, Stephan; Frank, Ronald; Goebel, Werner
CS Theodor-Boveri-Institut Biowissenschaften, Universitaet Wuerzburg, Wuerzburg, 97074, Germany
SO Appl. Environ. Microbiol. (1994), 60(9), 3120-7
CODEN: AEMIDF; ISSN: 0099-2240
DT Journal
LA English
AB All species of the genus *Listeria* secrete a major extracellular protein called p60. A comparison of the deduced amino acid sequences of all listerial p60 proteins previously indicated there were only a few regions which were unique to the pathogenic, food-borne species *Listeria monocytogenes*. Two of these p60 regions were chosen for the development of antibodies specific for the facultative intracellular species *L. monocytogenes*. Initially, these regions were characterized via epitope mapping, and this led to the development of two different synthetic peptides. Rabbits immunized with these peptides generated polyclonal antibodies that were then used in Western blot (immunoblot) analyses. Antiserum against peptide A (PepA) recognized the p60 protein in the supernatants collected from most *L. monocytogenes* serotypes except for several strains belonging to serotypes 4a and 4c. No p60-related protein was detected in the supernatants from other *Listeria* species with this anti-PepA antiserum. Antibodies raised against peptide D (PepD) reacted with p60 from all *L. monocytogenes* serotypes, including all 4a and 4c strains that were tested, and also showed no cross-reactivity with supernatant proteins from other *Listeria* species. Both antisera also detected p60 in supernatants of a large no. of environmental isolates of *L. monocytogenes*. Besides Western blot analyses, these antisera to PepA and PepD reacted with secreted p60 in an ELISA, indicating recognition of the native antigen in addn. to the denatured form. These data suggest that synthetic peptides derived from the variable region of the *L. monocytogenes* p60 protein may be useful for the development of an immunol. diagnostic assay.

L21 ANSWER 59 OF 71 MEDLINE
AN 95141830 MEDLINE
DN 95141830
TI Insertions within *iap* gene of *Listeria monocytogenes* generated by plasmid pLIV are not lethal.
AU Bielecki J
CS Institute of Microbiology, Warsaw University, Poland..
SO ACTA MICROBIOLOGICA POLONICA, (1994) 43 (2) 133-43.
Journal code: 17I. ISSN: 0001-6195.
CY Poland
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199505
AB To carry out efficient insertional mutagenesis in *Listeria monocytogenes* 1040S and to facilitate the characterisation of disrupted genes, three novel derivatives of plasmid pACYC 184 were constructed, p-LIV 1, pLIV-2 and pLIV-3. The technique is simple and rapid and can be

applied to most genes, even those that are essential. The method is unique and particularly effective by the use of a temperature-sensitive pE 194 replicon to facilitate the insertion of the gene. After transformation of the plasmid into *L. monocytogenes* it is possible to select for integration of the plasmid into the chromosome at 42 degrees C. High insertion frequency and convenience for looking for specific mutations with known sites of insertion make them the plasmid derivatives of choice for insertional mutagenesis in any bacteria that support replication of pE 194 TS. Three insertional mutants of *L. monocytogenes* are described. Two insertions were shown to be within *iap* gene, one in *hly* gene. The supernatants and the pellets from the *iap* mutants had no detectable haemolytic titer when assayed without the reducing agent.

L21 ANSWER 60 OF 71 HCAPLUS COPYRIGHT 2001 ACS DUPLICATE 5

AN 1994:186792 HCAPLUS

DN 120:186792

TI Method and probes for detection of *Listeria*

IN Schubert, Peter; Neumann, Siegfried; Pawelzik, Martina; Linxweiler, Winfried; Burger, Christa; Hofmann, Gottfried; Bubert, Andreas; Goebel, Werner; Koehler, Stefan

PA Merck Patent GmbH, Germany

SO Ger. Offen., 19 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 4318450	A1	19931216	DE 1993-4318450	19930603
	EP 576842	A2	19940105	EP 1993-108775	19930601
	EP 576842	A3	19941123		
	R: BE, CH, DE, FR, GB, IT, LI, NL				
	JP 06233699	A2	19940823	JP 1993-140531	19930611
	US 5932415	A	19990803	US 1995-456670	19950601
PRAI	DE 1992-4219111		19920611		
	DE 1992-4239567		19921125		
	US 1993-75248		19930611		
	US 1995-412227		19950327		

AB Synthetic peptides corresponding to regions of the invasion-associated protein (*iap* = protein p60) of *L. monocytogenes* and antibodies to these peptides are provided for specific detection of *L. monocytogenes* by immunoassay. Synthetic PCR probes based on gene *iap* for detection of nucleic acids of *L. monocytogenes* and *L. innocua* are also provided.

L21 ANSWER 61 OF 71 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD

AN 1993-265174 [34] WPIDS

DNC C1993-118206

TI *Listeria* monocytogenes detection by enzymatic nucleic acid amplification - using oligo-nucleotide(s) derived from alpha-haemolysin and/or beta-haemo-lysin virulence factors in polymerase chain reactions.

DC B04 D13 D16

IN CANDRIAN, U; FURRER, B; HOEFLEIN, C; LUETHY, J

PA (CAND-I) CANDRIAN U; (FURR-I) FURRER B; (HOEF-I) HOEFLEIN C; (LUET-I) LUETHY J

CYC 1

PI CH 682156 A5 19930730 (199334)* 2p

Searched by David Schreiber 308-4292

ADT CH 682156 A5 CH 1990-2190 19900628

PRAI CH 1990-2190 19900628

AN 1993-265174 [34] WPIDS

AB CH 682156 A UPAB: 19931119

Detection method for *Listeria* (L.) monocytogenes (mono.) comprises using the enzymatic nucleic acid amplification of hly (alpha-haemolysin) and/or iap (beta-haemolysin) virulence factors. Pref. oligonucleotides (A) L01=5'-CGGAGGTTCCGCAAAAGATG-3'; L02=5'-CATCGACGGCAACCTCGGA-3'; L03=5'-CCATCTGTATAAGCTTTTGAAG-3'; and L04=5'-CCTCCAGAGTGATCGATGTT-3' are used for hly and oligonucleotides (B) AD03=5'-ACAAGCTGCACCTGTTGCAG-3'; AD07=5'-TGACAGCGTGTGTAGTAGTCA-3'; AD08=5'-GGCGCAGGTGTAGTTGCTTG-3' and AD09=5'-CTACACAAGCAACTACACCT-3' are used for iap.

USE/ADVANTAGE - L. mono can be detected in food samples by the oligonucleotides A and B. C.f. the classic bacteriological methods, the method is very fast (1-2 days) and sensitive thereby reducing any risk during the handling of L. mono. and avoiding possible genetic changes during the cultivation, e.g. the loss of virulence features.
Dwg.0/0

L21 ANSWER 62 OF 71 MEDLINE

AN 93273718 MEDLINE

DN 93273718

TI The iap gene of *Listeria* monocytogenes is essential for cell viability, and its gene product, p60, has bacteriolytic activity.

AU Wuenscher M D; Kohler S; Bubert A; Gerike U; Goebel W

CS Theodor-Boveri-Institut fur Biowissenschaften, Lehrstuhl fur Mikrobiologie, Universitat Wurzburg, Germany..

SO JOURNAL OF BACTERIOLOGY, (1993 Jun) 175 (11) 3491-501.

Journal code: HH3. ISSN: 0021-9193.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 199309

AB Expression of the iap gene of *Listeria* monocytogenes in the L. monocytogenes rough mutant RIII and in *Bacillus subtilis* DB104 caused the disruption of the cell chains which these two strains normally form under exponential growth conditions. The p60 protein produced by L. monocytogenes and B. subtilis DB104 also exhibited bacteriolytic activity detected in denaturing polyacrylamide gels containing heat-killed *Micrococcus lysodeikticus*. Purification of the p60 protein led to aggregation of p60 and loss of the cell chain disruption and bacteriolytic activities. A cysteine residue in the C-terminal part of p60 which is conserved in all p60-like proteins from the other *Listeria* species seems to be essential for both activities. The iap gene could not be inactivated without a loss of cell viability, indicating that p60 is an essential housekeeping protein for L. monocytogenes and probably also for other *Listeria* species. These data suggest that p60 possesses a murein hydrolase activity required for a late step in cell division.

L21 ANSWER 63 OF 71 MEDLINE

DUPLICATE 6

AN 93094153 MEDLINE

DN 93094153

TI Structural and functional properties of the p60 proteins from different

Searched by David Schreiber 308-4292

Listeria species.

AU Bubert A; Kuhn M; Goebel W; Kohler S
 CS Lehrstuhl fur Mikrobiologie, Theodor-Boveri-Institut fur
 Biowissenschaften, Universitat Wurzburg, Germany..
 SO JOURNAL OF BACTERIOLOGY, (1992 Dec) 174 (24) 8166-71.
 Journal code: HH3. ISSN: 0021-9193.
 CY United States
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 OS GENBANK-X52268; GENBANK-M80347; GENBANK-M80348; GENBANK-M80349;
 GENBANK-M80350; GENBANK-M80351; GENBANK-M80353; GENBANK-M95579
 EM 199303
 AB The major extracellular protein p60 of **Listeria monocytogenes**
 seems to be required for this microorganism's adherence to and invasion of
 3T6 mouse fibroblasts but not for adherence to human epithelial Caco-2
 cells. Western blot analysis with polyclonal antibodies against p60 of L.
 monocytogenes indicated the presence of cross-reacting proteins in the
 culture supernatants of all **Listeria** species. Protein p60 of L.
 monocytogenes could restore adhesion of the L. monocytogenes mutant RIII
 (impaired in the synthesis of p60) to mouse fibroblasts more efficiently
 than that of **Listeria grayi**. The amino acid sequences of the
 p60-related proteins of L. innocua, L. ivanovii, L. seeligeri, L.
 welshimeri, and L. grayi indicated highly conserved regions of about 120
 amino acids at both the N-terminal and the C-terminal ends. The middle
 portions of these proteins, consisting of about 240 amino acids, varied
 considerably. These parts include the repeat domain consisting of
 repetitions of Thr (T) and Asn (N) which was present only, albeit in
 different arrangements, in the p60 proteins of L. monocytogenes and L.
 innocua. The p60-related proteins of L. grayi, L. ivanovii, L. seeligeri,
 and L. welshimeri each contained an insertion of 54 amino acids which was
 absent in the p60 proteins of L. monocytogenes and L. innocua.

L21 ANSWER 64 OF 71 MEDLINE DUPLICATE 7
 AN 92384582 MEDLINE
 DN 92384582
 TI The homologous and heterologous regions within the **iap** gene
 allow genus- and species-specific identification of **Listeria**
 spp. by polymerase chain reaction.
 AU Bubert A; Kohler S; Goebel W
 CS Theodor-Boveri-Institut fur Biowissenschaften, Universitat Wurzburg,
 Germany..
 SO APPLIED AND ENVIRONMENTAL MICROBIOLOGY, (1992 Aug) 58 (8) 2625-32.
 Journal code: 6K6. ISSN: 0099-2240.
 CY United States
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 OS GENBANK-M80349; GENBANK-M80350; GENBANK-M80352; GENBANK-M80353;
 GENBANK-M80354; GENBANK-M55230; GENBANK-M55231; GENBANK-M55232;
 GENBANK-M55233; GENBANK-M55234
 EM 199212
 AB The **iap** gene of **Listeria** species encodes protein p60.
 The comparison of **iap**-related genes from different
Listeria species indicated common and variable regions within
 these genes which appeared to be specific for each **Listeria**

species. On the basis of the *iap* gene sequences, pairs of polymerase chain reaction (PCR) primers which allowed the unambiguous identification of all members of the genus *Listeria*, of groups of related *Listeria* species, and of *L. monocytogenes*, exclusively, were selected. The PCR primers specific for *L. monocytogenes* yielded PCR products which represented essentially the repeat region of the *iap* gene. The size of these PCR products allowed an estimate of the number of the TN repeat units within the repeat region of the p60 protein of an *L. monocytogenes* strain. The data indicated that the number of repeat units differed among *L. monocytogenes* isolates.

L21 ANSWER 65 OF 71 MEDLINE

AN 92364018 MEDLINE

DN 92364018

TI Development of polymerase chain reaction assays for detection of *Listeria monocytogenes* in clinical cerebrospinal fluid samples.

AU Jatón K; Sahli R; Bille J

CS Centre National des Listeria, University Hospital, Lausanne, Switzerland..

SO JOURNAL OF CLINICAL MICROBIOLOGY, (1992 Aug) 30 (8) 1931-6.

Journal code: HSH. ISSN: 0095-1137.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 199211

AB In order to improve the diagnosis of *Listeria* meningitis or meningoencephalitis, especially in patients who have received antibiotics before their cerebrospinal fluid (CSF) has been examined, two assays for the detection of *Listeria monocytogenes* based on the polymerase chain reaction (PCR) were evaluated. After a standard PCR, the amplified DNA was detected either by a second round of PCR with internal primers followed by gel electrophoresis and ethidium bromide staining (nested PCR) or by dot blot hybridization to an internal digoxigenin-labeled probe (PCR-dot blot). For PCR, two sets of primers within the invasion-associated protein gene (*iap* gene) were chosen. They allowed for the highly specific detection of all *L. monocytogenes* reference strains tested (serotypes 1/2a, 1/2b, 1/2c, 3a, 3b, 3c, 4a, 4b, 4c, 4d, and 7). These primers did not detect amplification products from various other gram-positive or gram-negative bacterial DNAs or human DNA. The sensitivities of both assays were assessed on sterile CSF samples that were artificially seeded with serial dilutions of *L. monocytogenes* serotype 4b cells. By both methods the limit of detection was less than 10 cells in the initial reaction. Since the nested PCR is more prone to contamination because of manipulation of the amplified products, a standard PCR assay followed by dot blot hybridization was applied to 52 CSF samples in a retrospective study. Of 28 CSF samples which were sterile or positive for bacteria other than *Listeria* species, 24 were PCR negative. (ABSTRACT TRUNCATED AT 250 WORDS)

L21 ANSWER 66 OF 71 MEDLINE

AN 92321789 MEDLINE

DN 92321789

TI Use of polymerase chain reaction for detection of *Listeria monocytogenes* in food.

AU Niederhauser C; Candrian U; Hofelein C; Jermini M; Buhler H P; Luthy J

CS Laboratory of Food Chemistry, University of Bern, Switzerland..

SO APPLIED AND ENVIRONMENTAL MICROBIOLOGY, (1992 May) 58 (5) 1564-8.
Journal code: 6K6. ISSN: 0099-2240.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 199210

AB A previously described polymerase chain reaction (PCR) assay (B. Furrer, U. Candrian, C. Hofelein, and J. Luthy, J. Appl. Bacteriol. 70:372-379, 1991) was used to analyze food for the presence of **Listeria monocytogenes**. Food samples were artificially contaminated to develop two procedures to detect the organism following enrichment steps. Procedure A was based on dilution of the enrichment broth followed by lysis of the bacteria and direct analysis of the lysate with PCR. With procedure A and artificially contaminated food samples, it was possible to detect fewer than 10 bacteria per 10 g of food. In procedure B, centrifugation was used to concentrate bacteria before lysis and PCR. With procedure A, 330 naturally contaminated food samples of several types were analyzed. Twenty samples were found to be positive for *L. monocytogenes*, which was in agreement with the classical culture technique. By using procedure B on a subset of 100 food samples, 14 were found to be positive by PCR whereas the classical culture method detected only 13. Analysis times, including enrichment steps, were 56 and 32 h with procedures A and B, respectively.

L21 ANSWER 67 OF 71 BIOSIS COPYRIGHT 2001 BIOSIS

AN 1992:399874 BIOSIS

DN BR43:55749

TI ASSIGNMENT OF **LISTERIA**-MONOCYTOGENES ISOLATES INTO TWO MAJOR GROUPS BASED ON PCR AMPLIFICATION AND RESTRICTION ENDONUCLEASE RE DIGESTION OF THE **IAP** GENE.

AU THOMAS E J G; TANAKA E; KING R; GANNON V P J

CS ANIMAL DISEASES RES. INST., AGRICULTURE CAN., LETHBRIDGE, ALBERTA, CAN.

SO 92ND GENERAL **MEETING** OF THE AMERICAN SOCIETY FOR MICROBIOLOGY, NEW ORLEANS, LOUISIANA, USA, MAY 26-30, 1992. ABSTR GEN MEET AM SOC MICROBIOL. (1992) 92 (0), 329.
CODEN: AGMME8.

DT **Conference**

FS BR; OLD

LA English

L21 ANSWER 68 OF 71 MEDLINE

AN 93079436 MEDLINE

DN 93079436

TI Restriction fragment length polymorphism in four virulence-associated genes of **Listeria monocytogenes**.

AU Vines A; Reeves M W; Hunter S; Swaminathan B

CS Department of Biology, Clark Atlanta University, GA 30314..

SO RESEARCH IN MICROBIOLOGY, (1992 Mar-Apr) 143 (3) 281-94.
Journal code: R6F. ISSN: 0923-2508.

CY France

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 199303

AB We observed restriction fragment length polymorphism in 4 genes of **Listeria monocytogenes** associated with virulence. Using the

polymerase chain reaction (PCR) and primers derived from published sequences, we amplified the following genes: hlyA coding for listeriolysin O, iap coding for a putative invasion-associated factor, mpl coding for a metalloprotease, and the prfA gene that positively regulates the hlyA gene. PCR-amplified DNA were cut with several restriction endonucleases, and the restriction profiles from 29 strains, representing 6 serovars (serovars 1/2a, 1/2b, 1/2c, 3a, 3b and 4b) were compared. Based on these restriction profiles, the strains were categorized into 2 subgroups: one group contained all 10 strains of serovars 1/2a, 1/2c and 3a, the other group contained all 19 strains of serovars 1/2b, 3b and 4b. This division is in complete agreement with multilocus enzyme electrophoretic analysis data which divide the species into the same 2 subgroups. Whether the differences observed in the nucleotide sequences of the 4 virulence-associated genes for the 2 subgroups of *L. monocytogenes* represent salient variations in pathogenic mechanisms is not known.

L21 ANSWER 69 OF 71 MEDLINE

AN 91310573 MEDLINE

DN 91310573

TI Expression of the *iap* gene coding for protein p60 of *Listeria monocytogenes* is controlled on the posttranscriptional level.

AU Kohler S; Bubert A; Vogel M; Goebel W

CS Institut fur Genetik und Mikrobiologie, Universitat Wurzburg, Germany..

SO JOURNAL OF BACTERIOLOGY, (1991 Aug) 173 (15) 4668-74.

Journal code: HH3. ISSN: 0021-9193.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

OS GENBANK-X52268

EM 199110

AB Expression of the *iap* gene of *Listeria monocytogenes* encoding a major extracellular protein (p60) was analyzed. Different start sites for transcription of the *iap* gene were identified by primer extension analysis in *L. monocytogenes* and in a recombinant *Escherichia coli* clone. The mutant RIII of *L. monocytogenes* represents a member of the frequently occurring *L. monocytogenes* R mutants, which form cell chains and produce greatly reduced amounts of p60. However, the concentrations of *iap*-specific mRNA were similar in mutant RIII and the wild-type strain. The introduction of additional copies of the *iap* gene from wild-type *L. monocytogenes* led to an equal increase of *iap* mRNA in both strains, but overexpression of protein p60 was only observed in the wild-type strain. The nucleotide sequences of both *iap* genes and their 5' noncoding regions were identical in all parts that are essential for efficient transcription of the *iap* gene, translation of the *iap*-specific mRNA, and transport of the p60 protein. These data suggest that the expression of the *iap* gene in *L. monocytogenes* is controlled on the posttranscriptional level by a specific factor that is defective in mutant RIII.

L21 ANSWER 70 OF 71 MEDLINE

AN 90256283 MEDLINE

DN 90256283

DUPLICATE 8

- TI The gene coding for protein p60 of *Listeria monocytogenes* and its use as a specific probe for *Listeria monocytogenes*.
 AU Kohler S; Leimeister-Wachter M; Chakraborty T; Lottspeich F; Goebel W
 CS Institut fur Genetik und Mikrobiologie, Universitat Wurzburg, Federal Republic of Germany..
 SO INFECTION AND IMMUNITY, (1990 Jun) 58 (6) 1943-50.
 Journal code: GO7. ISSN: 0019-9567.
 CY United States
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals; Cancer Journals
 OS GENBANK-X52268
 EM 199008
 AB The gene of *Listeria monocytogenes* that encodes a major extracellular protein (p60) was cloned in *Escherichia coli*. The gene was designated *iap*, as p60 was previously shown to represent an invasion-associated protein (M. Kuhn and W. Goebel, Infect. Immun. 57:55-61, 1989). The recombinant *E. coli* clone expressed p60, as shown by immunoblotting. The complete nucleotide sequence of *iap* was determined. The deduced amino acid sequence of p60 (484 amino acids) contains a putative N-terminal signal sequence of 27 amino acids and an extended repeat region consisting of 19 threonine-asparagine units. Hybridization with the entire *iap* gene revealed the presence of homologous sequences in most other *Listeria* species. In contrast, a 400-base-pair internal *iap* probe which contained the whole repeat region hybridized only with genomic DNA from *L. monocytogenes*. Four oligonucleotides previously described as specific probes for the detection of *L. monocytogenes* (A. R. Datta, B. A. Wentz, D. Shook, and M. W. Trucksess, Appl. Environ. Microbiol. 54:2933-2937, 1988) were shown to be part of the *iap* gene.
- L21 ANSWER 71 OF 71 MEDLINE DUPLICATE 9
 AN 90154639 MEDLINE
 DN 90154639
 TI Sensitive detection of two IgG Fc receptors of mouse macrophages by chemiluminescence analysis.
 AU Majima T; Itoh K; Yatsu J; Yoshie O; Ishida N
 CS Department of Bacteriology, Tohoku University School of Medicine, Sendai.
 SO IMMUNOPHARMACOLOGY AND IMMUNOTOXICOLOGY, (1989) 11 (2-3) 289-307.
 Journal code: IAI. ISSN: 0892-3973.
 CY United States
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 199005
 AB Luminol-enhanced chemiluminescence assay was used to detect the surface expression and the consequent activation of receptors (FcRI and FcRII) of murine macrophages (M phi s). When murine IgG2a was used for the specific detection of FcRI and IgG2b for FcRII, a newly established procedure enabled us to detect the activation of each receptor with as few as 3 X 10(5) M phi s. Briefly, TNP-SRBC coated with monoclonal IgG2a or IgG2b antibodies directed to TNP (sensitized SRBC) were used as reagent, in the presence of 1 X 10(-5) M luminol, and the emission was measured with a liquid scintillation counter. When results obtained by chemiluminescence counting were compared to the results obtained by the rosette formation by adding the same SRBC reagent to peritoneal M phi s obtained after ip

Baskar 09/372,036

injection of **Listeria**, fortified chemiluminescence counting allowed us to obtain a more definite answer about the activation of each receptor. Under the conditions established, the specific activation of FcRI was obtained by the addition of rIFN alpha A/D to the resident M phi s in vitro and the specific activation of spleen M phi FcRII by iv injection of **IAP** (Immunosuppressive acidic protein) into mice. These two results supported the independence of the two receptors detected by the assay.

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